Public Utilities

Volume 56 No. 1 July 7, 1955

REPRINTS OF ARTICLES
(200 or more copies)
available on orders received within 30 days after publication date.
Address
WASHINGTON OFFICE
for quotations.

PUBLIC UTILITIES FORTNIGHTLY . . stands for federal and state regulation of both privately owned and operated utilities and publicly owned and operated utilities, on a fair and nondiscriminatory basis; for nondiscriminatory administration of laws; for equitable and nondiscriminatory taxation; and, in general—for the perpetuation of the free enterprise system. It is an open forum for the free expression of opinion concerning public utility regulation and allied topics. It is supported by subscription and advertising revenue; it is not the mouthpiece of any group or faction; it is not under the editorial supervision of, nor does it bear the endorsement of, any organization or association. The editors do not assume responsibility for the opinions expressed by its contributors.

Subscriptions: Address correspondence to PUBLIC UTILITIES FORTNIGHTLY, circulation department, Munsey Building, Washington 4, D. C. Allow one month for change of address.

Single copies $1.00. Annual subscription price (26 issues a year): United States and possessions, $15.00; Pan American countries, $15.00; Canada, $16.00; all other countries, $17.50.

Entered as second-class matter April 29, 1915, under the Act of March 3, 1879, at the Post Office at Baltimore, Md., December 31, 1936.

Public Utilities FORTNIGHTLY

VOLUME 56 JULY 7, 1955 NUMBER 1

ARTICLES

FEATURE SECTIONS

PUBLIC UTILITIES REPORTS, INC., PUBLISHERS

Executive, Editorial & Advertising Offices....MUNSEY BLDG., WASHINGTON 4, D. C.
Publication Office .....CANDLER BUILDING, BALTIMORE 2, MD.

Advertising Representatives:
New York 6: Robert S. Farley, 111 Broadway, COrtland 7-6638
Cleveland 15: Macintyre-Simpson & Woods, 1900 Euclid Avenue, CHerry 1-1501
Chicago 1: Macintyre-Simpson & Woods, 75 E. Wacker Drive, CEntral 6-1715
Pacific Coast: M. D. Pugh, 2721 North Marengo Avenue, Altadena, Calif., SYcamore 7-2894

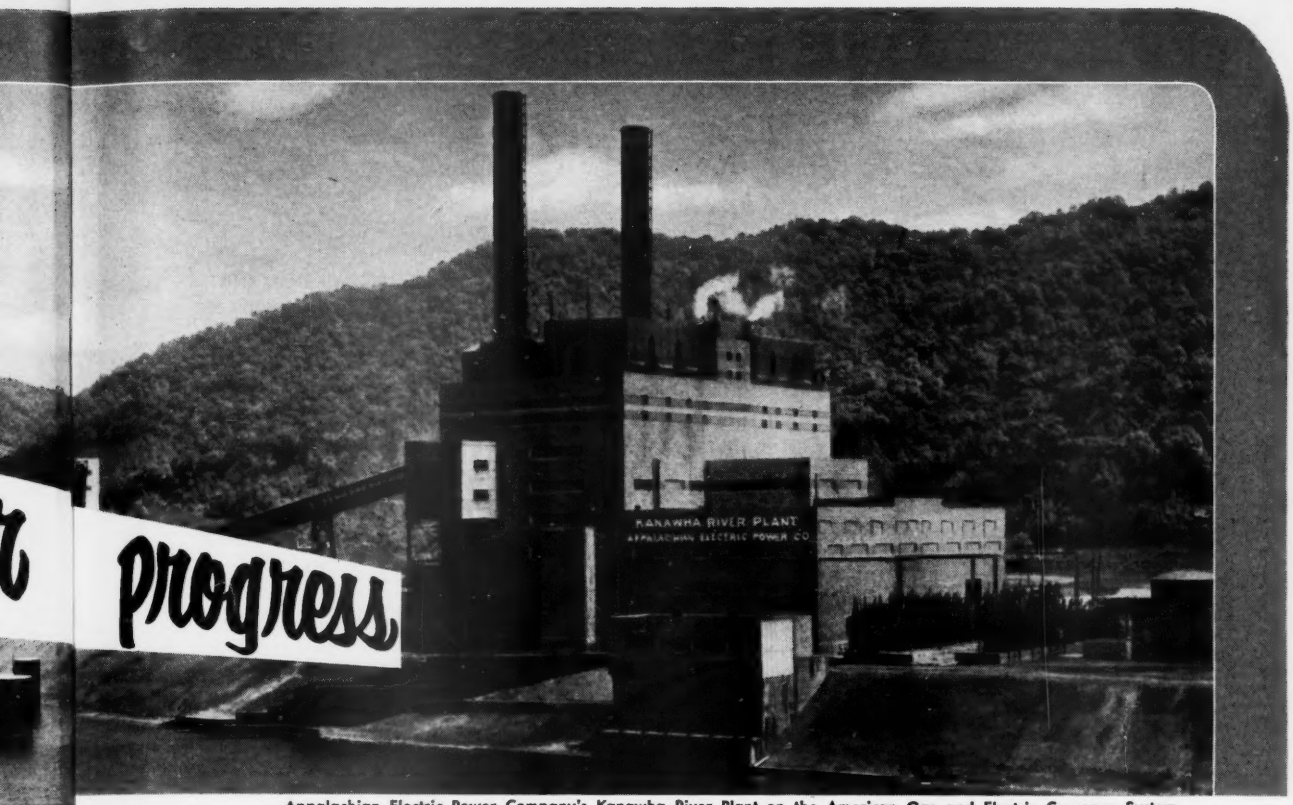
Pacing the nation's power

10 BEST ANNUAL HEAT RATES

(Plant Net Heat Rates)
Btu per kwhr*

9170 KANAWHA	**Appalachian Electric Power Co. on the American Gas and Electric System—** Two B&W Pressure-Fired Radiant Reheat Boilers with Gas Recirculation and Divided Furnace Construction.
9329 TANNERS CREEK	**Indiana and Michigan Electric Co. on the American Gas and Electric System—** Three B&W Pressure-Fired Radiant Reheat Boilers with Gas Recirculation and Divided Furnace Construction.
9418 ALBANY	**Niagara Mohawk Power Corporation.**
9454 SCHILLER	**Public Service Co. of New Hampshire—** Two B&W-built Mercury Boilers.
9510 DUNKIRK	**Niagara Mohawk Power Corporation.**
9540 J. R. WHITING	**Consumers Power—** Three B&W Radiant Reheat Boilers.
9594 PHILIP SPORN	**Appalachian Electric Power Co. and The Ohio Power Co. on the American Gas and Electric System—** Four B&W Pressure-Fired Radiant Reheat Boilers with Gas Recirculation and Divided Furnace Construction.
9630 ST. CLAIR	**Detroit Edison Co.—** Four B&W Radiant Reheat Boilers with Gas Recirculation and Divided Furnace Construction.
9661 EASTLAKE	**The Cleveland Electric Illuminating Co.**
9815 ASTORIA	**Consolidated Edison Co. of New York, Inc.—** Two B&W Pressure-Fired Radiant Reheat Boilers with Gas Recirculation and Divided Furnace Construction.

* Federal Power Commission figures



Appalachian Electric Power Company's Kanawha River Plant on the American Gas and Electric Company System.

Headed by a record 9170 Btu per net kwhr, these ten plants were the most efficient central stations in the country during 1953, the most recent year for which complete heat rate data are available.

Reflecting the decision of the electric companies to utilize the most recent engineering advances, even during a time of critical capacity expansion, the outstanding performance of these modern plants is a tribute to the foresight of the whole industry. It affords one more indication that the prime interest of this unique team of electric companies and their major suppliers lies in producing still lower-cost kilowatts for a still greater America.

B&W Boilers in many of these stations are designed with such advances as Pressure-Firing, Cyclone Steam Separators, Gas Recirculation and Divided Furnace Construction — features which have contributed substantially toward the outstanding efficiency levels achieved. Also, all steam generating units are equipped with reheaters, a development of major importance in improving plant efficiency.

Pressure-Firing

Among the many advantages of this important engineering advance, as utilized, for example, by the Kanawha River units, is elimination of air infiltration to reduce stack loss and assure greater efficiency. Maintenance is reduced and the use of forced-draft fans alone means easier starting, smoother operation and simpler controls. These are the reasons why more than 100 Pressure-Fired B&W units are now in service or under construction.

Cyclone Steam Separators

Operating inside the steam drum, these simple, stationary devices require no power or maintenance and do not take up building room. The Cyclone Separators assure positive natural circulation at high pressure, and with the steam scrubbers, make it possible to send steam of highest purity to the turbine. Consequently, turbine efficiency is maintained and turbine outages reduced.

Divided Furnace Construction

With this B&W construction, building volume is held to a minimum. Both sides of the furnace division wall are used to absorb heat and thus make it possible to achieve the required furnace cooling surface without excessive increase in building volume.

* * * * * *

The record heat rates set by these leading generating stations are closely followed by those of many more plants across the country which are producing low-cost kilowatts at efficiency levels unattainable just a few years ago. And B&W is continuing to devote its energies and its long-accumulated experience to the development of boiler designs that will contribute to still higher levels of steam generating efficiency. The Babcock & Wilcox Company, Boiler Division, 161 East 42nd Street, New York 17, N. Y.

BABCOCK & WILCOX

BOILER DIVISION

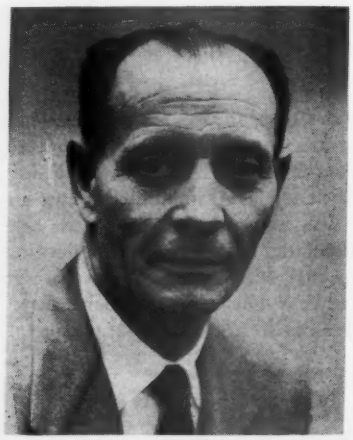
G-696

Pages with the Editors

DURING the past month when many folks along the eastern seaboard were reopening summer homes and beach residences, they may have had some cause to remember all over again the hurricane visitations of Carol and Hazel, and perhaps other storms during the late summer of 1954. Bare spots in the lawn and dead limbs, along with the uprooted and fallen oaks and other trees not yet cleaned up, recalled all too vividly the hectic hours of last summer's windy visitors from the tropics.

IN addition, they may well have discovered hitherto unsuspected damage to lawn mowers and boat motors corroded with salt spray, even after they seemed to work all right last year. It sometimes takes well over a year to obliterate the last traces of a really bad hurricane passage, even in a modest summer cottage with small grounds.

WE can well imagine, therefore, the much greater magnitude of damage, financially and physically, wreaked upon the far-flung and exposed facilities of our public utility companies of all kinds. One could probably start a good many arguments about whether hurricanes are coming along the eastern seaboard more frequently or more violently than in former years. And a good many homemade meterologists who have only vague or general notions about the phenomenon of atomic fission, are quite sure in their opinions about the effect of the atom bomb tests on the general state of the weather throughout the country.



H. E. GARRETT

BUT whether hurricanes are coming along in greater number or intensity, it is a fact that within a period of six weeks in the last year the Middle and North Atlantic states were hit by three tropical hurricanes of major force. With the dynamic growth and expansion of our public utility systems, due to rapid postwar construction and the higher prices for damage construction and equipment, the cost of these visitations is giving utility management serious food for thought.

THE opening article in this issue gives us some practical advice about how public utilities can protect their properties, insurancewise, from such losses in the future. The author of this article, H. E. GARRETT, is an insurance consultant with Ebasco Services Incorporated of New York. A native of Colorado, MR. GARRETT was educated in Denver where he attended the University of Denver and the University of Denver Law School, prior to coming to New York in 1926.

SINCE that time MR. GARRETT has been engaged mostly in insurance work of an actuarial nature, following some service with the old Chase National Bank and Federal Reserve Bank of New York. In 1931 he joined the New York Workmen's Compensation Rating Bureau, and in 1935 transferred to the rating division of the bureau where he remained until 1945, becoming assistant superintendent in determining workmen's compensation insurance rates. Since that time MR. GARRETT has been employed in the insurance department of Ebasco Services. He is a


Once in a Blue Moon
you'll need a
new Power Plant
. . . then Pioneer Service & Engineering Co. with 53 years of experience in this specialized field, stands ready to help you with a complete service including preliminary plans, load studies and site selection, the design of the plant and arrangements for financing its cost.
Our services and facilities are outlined in our booklet, "Pioneering New Horizons" yours for the asking.
PS&E
53 YEARS
Pioneer Service & Engineering Co.
231 SOUTH LA SALLE STREET • CHICAGO 4, ILLINOIS
Consulting Engineering • Power Plant Design
Purchasing and Expediting • Financial Advisory Service
Forecast, Load Study and Performance Analysis
Stock Transfer and Dividend Disbursement
Valuation, Insurance, Rate and Business Advisory Service

graduate of the school of business administration of New York University (MBA, '52).

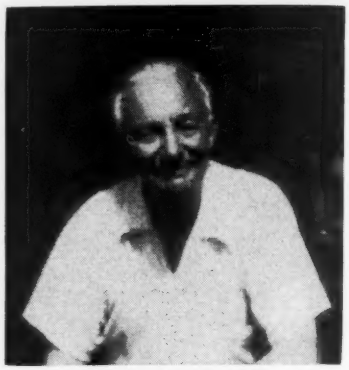
* * * *

KIMBALL I. JACK, general sales, promotion, and information manager of the Washington Water Power Company, Spokane, Washington, has written an account, beginning on page 13, of how his organization deals with the somewhat difficult problem of utilizing employee relationships and contacts to spread the true facts and importance of the enterprise system in public service. MR. JACK was formerly connected with the Utah Power & Light Company of Salt Lake City. He was educated at the University of Utah and has done some special work in Chicago in the field of economics. Since the late thirties he has occupied his present post with the Washington Water Power Company of Spokane.

* * * *

IN his article beginning on page 25, JAMES H. COLLINS, professional writer of business articles now resident in Hollywood, California, has taken up the subject of automatic toll ticketing and other automatic accounting now being installed by Bell and independent companies. This article shows that some form of automatic control was necessary to protect the subscriber as well as the telephone company from operating abuses or difficulties which might otherwise grow as a result of the new freedom allowed in direct dialing. There are still problems to be worked out in gaining complete public confidence in mechanical auditing as compared with the older system of tickets written by operators. Automatic ticketing is part of the new merchandising objectives in the telephone business, but it involves new telephone habits and a new teaching problem for the subscriber.

KIMBALL I. JACK



JAMES H. COLLINS

* * * *

IN our "What Others Think" department of this issue (beginning page 47), we have a by-lined review article by C. E. Wright of Jacksonville, Florida, dealing with the first atomic energy conference held by the college of engineering of the University of Florida. The possibility of developing atomic energy is a very important consideration for the Peninsula state because of the lack of local fuels (oil, gas, or coal).

ANOTHER item in our review department (page 49) deals with an analysis of liberalized depreciation features in the new Internal Revenue Code of 1954, by C. N. Ostergren of the American Telephone and Telegraph Company. In it Mr. Ostergren points to the need for careful consideration by utilities of liberalized depreciation practices. He does not recommend any formula.

THE next number of this magazine will be out July 21st.

The Editors

Now...Univac Tells Itself What To Do!

Univac no longer asks for the detailed instruction codes required by other computers. Univac now *automatically* produces complex coded routines when given a simple instruction.

• This truly remarkable new Remington Rand development cuts months from programming time...is easily adaptable to your individual requirements.

If you would like more information about Univac automatic programming, write to the address below for EL264.

ELECTRONIC COMPUTER DEPARTMENT **Remington Rand** ROOM 1738, 315 FOURTH AVE., NEW YORK 10, N. Y.
DIVISION OF SPERRY RAND CORPORATION

Coming IN THE NEXT ISSUE

★

THE PUGET SOUND UTILITIES COUNCIL

This article presents an interesting set of facts on the combination of privately owned and publicly owned utilities in the Pacific Northwest. It is to some extent the outgrowth of the administration's new "partnership" policy for regional development of natural resources by combinations of local interest, both public and private, under the direction of the federal government. There may be some disagreements over details of this type of organization. The author, Edward R. Lucas, analyzes the working arrangements between federal, municipal, and private organizations under the new Puget Sound Utilities Council. He shows how it is a voluntary and flexible group, sponsoring a program that requires no help from the federal government for large projects. It has no independent legal or corporate existence and may be dissolved at any time by mutual agreement. Nevertheless, the sponsors work for important accomplishments.

UNCLE SAM—BIGGEST UTILITY CUSTOMER

David A. Kosh, more recently active as a rate case specialist, was one of the pioneers in organizing a small group of people within the procurement division of the U. S. Treasury to look after the interests of Uncle Sam as a utility customer. He has written in this article a description of this organization with which public utilities must deal when they serve the federal government. The author claims considerable savings as a result of this organization's vigilant activities. Needless to say, the federal government is becoming year by year a bigger and bigger customer of all forms of utility service. As a matter of fact, the federal government's own rôle as a utility customer is probably growing faster than the rapidly expanding general average of utility customer relations.

BAROMETERS OF GOOD WILL

When an effort is made to estimate roughly what the public likes and dislikes about the utility service in any community, the formulation of any remedial program inevitably raises a lot of questions. Alfred M. Cooper, professional author, now resident in Indio, California, has taken a double-checking approach in the form of two surveys. One is a public attitude survey; the other is an employee performance survey. Mr. Cooper, who has a background of personnel supervision for both publicly and privately owned utilities, considers these two inquiries as necessarily supplemental, forming the basis for any remedial program. He tells how they work and how to go about them. Opinions expressed by thousands of citizens interviewed by a number of electric, gas, and telephone companies show clearly that people are influenced in their attitude toward the utility by five factors, in the following order of importance: (1) physical service delivery to the customer; (2) employee personal service; (3) rates; (4) publicity; and (5) appearance of the utility's buildings and equipment. These and other interesting suggestions for creating "barometers of good will" are developed in Mr. Cooper's article.

★

Also . . . ***Special financial news, digests, and interpretations of court and commission decisions, general news happenings, reviews, Washington gossip, and other features of interest to public utility regulators, companies, executives, financial experts, employees, investors, and others.***

Good in its day...

But the sad-iron would be sad indeed compared with its modern electric counterpart. There's another modern "electric appliance" available today whose work output is as overwhelmingly superior as the electric iron vs. the sad-iron.

It's the *Bill Frequency Analyzer* a machine of our invention for analyzing bills in 'One Step'. Bills can go through the Analyzer at the rate of 200,000 to 300,000 a day! Thus you can get a clear, accurate analyzation of your billing in a matter of hours instead of days.

The Analyzer method saves time and definitely cuts costs. Even if you use your most experienced personnel and office calculating machines we can save you up to 50% with the Analyzer method. Besides, all the work is done in our office!

Send us a sample of your billing sheet, a copy of rate schedules and an estimate of number of customers billed on each rate and your frequency table requirements. We'll give you an estimate of costs *without charge*. Then compare our costs with your own!

RECORDING & STATISTICAL CORP.

100 Sixth Avenue • New York 13, N. Y.

Remarkable Remarks

"There never was in the world two opinions alike."
—MONTAIGNE

H. ROWAN GAITHER, JR.
President, Ford Foundation.

"The future of our country is dependent upon the adequacy and quality of its educational institutions."

BENJAMIN F. FAIRLESS
Former chairman of the board, United States Steel Corporation.

"My old mother used to tell me that a good thing to do when you don't want to get into trouble is to stop talking about it. I think that time has arrived."

ARTHUR F. BURNS
Chairman, Council of Economic Advisers.

"The basic aim of the tax legislation last year was to stimulate the expansion of the economy, so that the growth in employment and production would be resumed."

GEORGE M. HUMPHREY
Secretary of the Treasury.

"Widespread ownership of American industry is to be encouraged. The success of new risk-taking enterprise is peculiarly dependent on equity financing. A healthy stock market is essential if the rôle of equity financing in corporate finance is to flourish."

EDITORIAL STATEMENT
San Francisco News.

"Capitalism means private enterprise, the financing of production by the wealth and labor of individual citizens. It is, indeed, allied with those freedoms set forth in the Bill of Rights, the unalienable right of every American to work out his own destiny."

DOUGLAS MCKAY
Secretary of the Interior.

"We are firmly convinced that where a nonfederal proposal can provide results which, in terms of comprehensive development, are reasonably comparable with those anticipated from a federal project, the people of the region should be encouraged to utilize, in every proper way, the available capacities of public or private organizations for doing the job on a nonfederal basis under conditions fully protecting the public interests."

WILLIAM E. JENNER
U. S. Senator from Indiana.

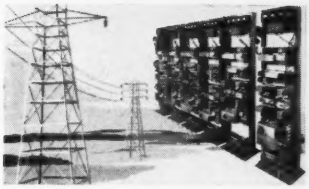
"Congress raised taxes in the pious hope that the budget would be balanced, but the spenders sent spending higher than ever, while the propaganda machines told the people what to think. The fetish of a 'balanced budget' is now the palace guard's excuse for collecting in peacetime far more taxes than they dared collect in war. The problem is not to fit taxes to spending but to cut taxes first and fit spending to a much lower income."

Y. FRANK FREEMAN
Vice president, Paramount Studio.

". . . Washington has come too close to the people. I believe in personal freedom, independence, states' rights, and free enterprise. Yet we are being submerged, slowly but surely. More and more power is being concentrated to mold our way of life. Whether we can reverse this trend remains to be seen. Our best salvation is to have our people invest in America. They should invest not only in tangible possessions, but become, increasingly, investors in the great character values. Unless we keep and expand our great spiritual values, the country and the people will fail."

Communications planning requires the communications specialist —

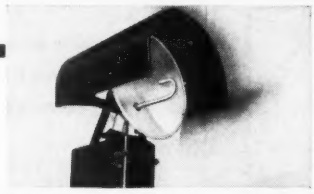
MOTOROLA



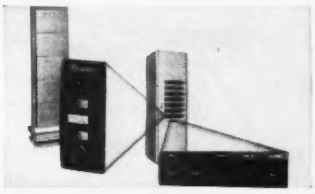
POWER LINE CARRIER—FM power line communications and aperiodic coupling units.

TWO-WAY MOBILE RADIO—vehicular and base station equipment for every application.

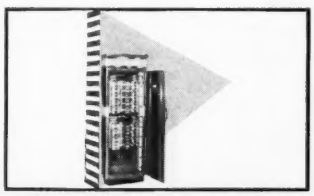
TWO-WAY PORTABLE RADIO—Handie-Talkie® portable radiophones and "Handie-Micro-Talkie" transmitter.



MICROWAVE SYSTEMS—multi-channel point-to-point message, control and video circuits.



SUPERVISORY CONTROL—All-tone systems for remote control and indication.



VOICE FREQUENCY CARRIER—frequency-shift carrier for control and communications.

SYSTEMS ENGINEERING—Sound planning, complete surveys, practical integrated systems design.

SERVICE—Installation, maintenance, parts, continuing customer service.

FINANCE—Purchase, conditional sale, lease (with or without equity), with single contract installation and maintenance if desired.

Whether you're just discovering all the advantages of a specialized communications system, or adding to your present one, you need expert professional counsel. With over 25 years of pioneering and experience *exclusively* in electronics, Motorola Communications Engineers are well qualified to help you solve all your communications problems. By producing such a great variety of basic equipment, we can integrate it to provide a custom-made communications system at production line prices. Unexcelled engineering skill, a creed of quality products and customer service stand back of the Motorola representative in your area. Let him show you how the various time-saving, profit-making communications tools will help you. Write, phone or wire today.

MOTOROLA

2-WAY RADIO

MOTOROLA COMMUNICATIONS & ELECTRONICS, INC.
A SUBSIDIARY OF MOTOROLA, INC.
4501 AUGUSTA BOULEVARD • CHICAGO 51, ILLINOIS
ROGERS MAJESTIC ELECTRONICS LTD. TORONTO, CANADA

Motorola is the only complete supplier of communications and control equipment for the power utility industry — specialized engineering . . . product . . . customer service . . . parts . . . installation . . . maintenance . . . finance . . . lease. "The best costs you less—specify Motorola."

In Your Distribution Substations

WHAT DOES IT TAKE

to Switch the Primary?

Do you have to consider whether the load is on and what it amounts to? What is the KVA rating of the transformer? And what about the system voltage?

Do you have to unload the secondary before breaking the primary?

What would happen in an emergency? . . . or if someone opened a switch inadvertently?

These considerations apply (consciously or unconsciously) when conventional air switches are used.

SPECIALISTS IN HIGH-VOLTAGE

XUM

The S&C LOAD INTERRUPTER takes nothing but a pull on the handle

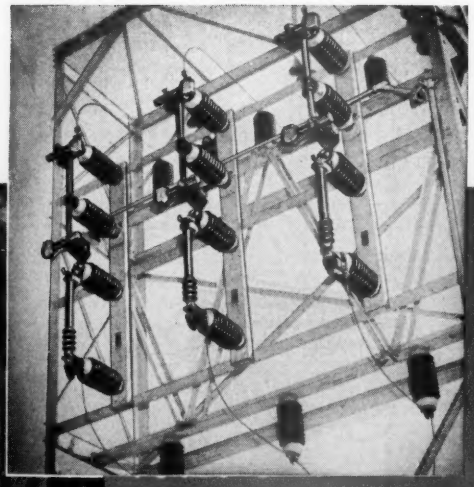
● The S&C Load Interrupter (Alduti Type) can break the primary circuit of a distribution substation any time under any condition (except short circuit). Switching cannot lead to dangerous phase-to-phase or phase-to-ground faults. It cannot endanger men or equipment.

● When you break the magnetizing current, the break is positive—clean—decisive. (You don't have to "dog" it as a preliminary.) You are completely independent of wind velocity and wind direction.

● Then too you can break the magnetizing current of the larger transformers—an impossibility with conventional air switches.

● Under emergency conditions—or for protection against inadvertent operation—you can interrupt the entire load current of the substation. Thus you have two ways to drop the load—on either primary or secondary.

Do you have these operating advantages at your substations?



Inset shows a close-up of S&C Load Interrupters in service on the primary of a typical distribution substation.

S&C Interrupters bring new concepts of operating convenience, and new thinking in system layout. We will gladly send you this booklet containing detailed information about them.

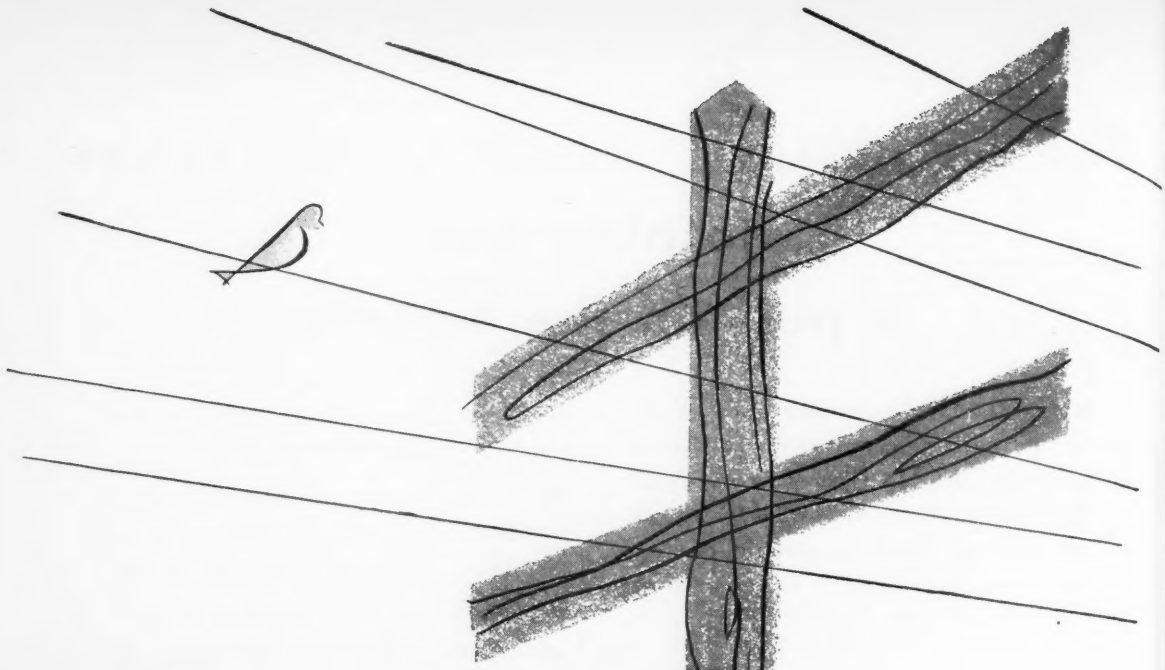
S&C

ELECTRIC COMPANY

4440 RAVENSWOOD AVENUE
CHICAGO 40, ILLINOIS, U.S.A.
formerly Schweitzer & Conrad, Inc.

IN CANADA, S&C ELECTRIC CANADA, LTD.
8 VANSCO ROAD, TORONTO 14, ONTARIO

CIRCUIT INTERRUPTION



Things to think about

when investing in treated wood products

Q. How much longer than untreated woods, do treated woods last?

A. Properly treated woods, such as woods treated by the American Creosoting Company, last four, five, even ten times as long as untreated woods. Under many conditions, wood treated by Amcreco may be considered essentially permanent.

Q. Are all modern-day wood preservatives about equal in value?

A. No, you can't assume that they are because none of the newly introduced preservatives have as yet been tried by the test of time. Creosote, on the other hand, which has been the number one wood preservative for over fifty years, is still number one in customer preference because of its established service record.

Q. Are all treatment companies about the same — one's as capable as another?

A. No, all treatment companies are not about the same. Some, such as the American Creosoting Company, which has been in the business for over fifty years, have more experience than others. Some, such as the American Creosoting Company, have had an opportunity to build up a treatment and service organization that is second to none.

The next time you are in need of wood products, specify treated wood products . . . poles, cross arms, conduit and other construction woods that have been pressure treated in creosote by the American Creosoting Company. We would appreciate the opportunity to quote on your needs.

AMCRECO
LOWRY PROCESS
CREOSOTED WOOD
Since 1904

AMERICAN CREOSOTING COMPANY
INCORPORATED

Shreveport Creosoting Company
Colonial Creosoting Company
Federal Creosoting Company
Indiana Creosoting Company

AMCRECO
LOWRY PROCESS
CREOSOTED WOOD

Georgia Forest Products Company
Gulf States Creosoting Company
Georgia Creosoting Company
Kettle River Company

LOUISVILLE 2, KENTUCKY
12 FIELD SALES OFFICES TO SERVE YOU

YOUR Special Advantage for JULY

. . . . this is the SPECIAL ADVANTAGE STICKER which dozens of companies are using this month on the front cover of Electrified Industry. →

THE SPECIAL ADVANTAGES of electric service include: . . Convenience . . . Flexibility . . Instant Starts . . . Economy . . . Reliability . . Cleanliness . . . Good Regulation . . . Ability to take Overloads . . . and the Cooperation and Advice on Electrical Problems which most power companies offer.

Customers are reminded of you and of the SPECIAL ADVANTAGES of being on your lines. In addition your stickers help them route your messages to additional readers.

Some companies make up stickers which carry their own slogan (a good idea). Others have Reddy Kilowatt remind the readers that electric power is their willing servant.

Power salesmen make friends for your companies and add to your "net divisable." Years ago they decided that they needed help to overcome the effects of the competitive power, diesel-and-steam, agin-the-utilities magazines that they saw on their customers desks. They helped create the picture magazine which tells the true story that electricity, properly used, is worth many times its cost.

They use this magazine to make 21¢ calls for them in between the $5 and $10 calls they make in person.

By using Electrified Industry they are able to maintain better-than-ever customer contact and increase the net revenue of the utilities.

ELECTRIFIED INDUSTRY and ***Today's Business***

Martin Publications—20 No. Wacker Dr., Chicago 6

THE *FORWARD* LOOK ...IN TRUCKS!

Dodge has changed the picture on performance, price!

Today there's a changed picture of truck power, payload, price! For example, do you know the answers to these 3 questions?

1—What trucks provide the highest horsepower of the 5 leading makes *in every conventional model*, ½-ton through 3½-ton?

2—What trucks have the highest payload in more models, 1½- through 4-ton, than any other leading make?

3—What trucks have the lowest factory retail price in more popular models than any other leading make?

In each case the answer is, "Dodge '*Job-Rated*' trucks" . . . the trucks with the Forward Look! Find out for yourself how Dodge trucks give you more visibility, more modern styling, more of everything you want in a truck. See your dependable Dodge Truck dealer now.

ALL-NEW

DODGE

"Job-Rated"

TRUCKS

PRODUCTS OF CHRYSLER CORPORATION

UTILITIES *A·l·m·a·n·a·c·k*

JULY

Thursday—7 *Institute of Gas Technology will hold summer session course on natural gas distribution, Chicago, Ill. July 25–Aug. 12.* ***Advance notice.***	**Friday—8** *National Association of Railroad and Utilities Commissioners begins executive committee meeting, Chicago, Ill.*	**Saturday—9** *American Gas Association will hold board of directors meeting, Denver, Colo. July 29.* ***Advance notice.***	**Sunday—10** *American Trade Association Executives will hold meeting, Mackinac Island, Mich. Aug. 1–3.* ***Advance notice.***
Monday—11 *National Housewares and Home Appliance Manufacturers Exhibits begin, Atlantic City, N. J.*	**Tuesday—12** *National Shade Tree Conference will be held, Santa Barbara, Cal. Aug. 1–5.* ***Advance notice.***	**Wednesday—13** *Southeastern Electric Exchange, Personnel Administration Section, will hold meeting, Roanoke, Va. Aug. 11, 12.* ***Advance notice.***	**Thursday—14** *American Institute of Electrical Engineers will hold Pacific general meeting, Butte, Mont. Aug. 15–19.* ***Advance notice.***
Friday—15 *American Bar Association will hold annual meeting, Philadelphia, Pa. Aug. 22–26.* ***Advance notice.***	**Saturday—16** *Annual Appalachian Gas Measurement Short Course will be held, Morgantown, W. Va. Aug. 29–31.* ***Advance notice.***	**Sunday—17** *Mid-West Gas Association will hold gas school and conference, Ames, Iowa. Sept. 7–9.* ***Advance notice.***	**Monday—18** *Southeastern Gas Association begins short course in gas technology, Raleigh, N. C.*
Tuesday—19 *Michigan Independent Telephone Association will hold annual convention, Grand Rapids, Mich. Sept. 8, 9.* ***Advance notice.***	**Wednesday—20** *New Jersey Gas Association will hold meeting, Spring Lake, N. J. Sept. 9.* ***Advance notice.***	**Thursday—21** *Independent Natural Gas Association of America will hold annual meeting, Jasper National Park, Alberta, Canada. Sept. 11–13.* ***Advance notice.***	**Friday—22** *Western Summer Radio-Television and Appliance Market ends 5-day western merchandise mart, San Francisco, Cal.*

Courtesy, The United Illuminating Company

Power Plant Nocturne

Public Utilities
FORTNIGHTLY

VOL. 56, NO. 1 JULY 7, 1955

What to Do about Hurricane Loss Protection

Within the period of six weeks during the past year the Middle and North Atlantic states were hit by three tropical hurricanes of major intensity. Here is some practical advice about protection from such losses in the future.

BY H. E. GARRETT*

THE Middle and North Atlantic sections of our country were visited by three tropical hurricanes of major intensity during the six weeks between September 11 and October 15, 1954.

The property damage losses paid or to be paid by insurance companies as the result of these occurrences have been estimated to approximate $300,000,000. No accurate estimate of the damage not covered by insurance can be made, but it is probably safe to estimate that it at least equaled, and probably exceeded, the amount covered by insurance. The additional damage which could have been caused by slight variations in conditions, such as the point where a given storm veered out to sea, is, of course, beyond estimation.

Three such storms in so short a period in this section of the country are un-

*Consultant, Ebasco Services Incorporated, New York, New York. For additional personal note, see "Pages with the Editors."

precedented in the annals of hurricane history. It thus emphasizes the fact that past evaluation of the hurricane hazard cannot be unqualifiedly relied upon.

It is, therefore, suggested that even though this matter has been considered in the past, this is an opportune time for insurance buyers and others responsible for the safeguarding of business assets to carefully re-evaluate the exposure of their concern's physical properties to the hazard of hurricane loss.

Reconsideration of this feature is especially important and timely for electric generating and distribution companies. These utility companies have recently witnessed considerable growth of their facilities and now own extensive properties both old and new in the form of generating plants, warehouses, office buildings, and similar structures, which represent a high concentration of values and are often located in a position particularly exposed to the perils presented by hurricane hazard. They also own distribution lines and substations of considerable value which comprise a less concentrated but highly vulnerable exposure to damage over a large territory.

The problem of properly evaluating the hurricane loss exposure and arranging an insurance program that will balance proper protection against equitable premium costs thus becomes a matter of particular importance to them.

UNFORTUNATELY, while the exposure to loss applies to the entire industry, differences in size, location, condition of properties, and the financial and insurance philosophy among individual utility companies make the consideration of this problem largely an individual utility matter. Therefore, no over-all set formula for the entire industry which will automatically produce the answers to the problems of specific protection measures to apply, amount of loss to self-assume, how to determine insurance values, what specific insurance to purchase, and how much to pay for it, can be devised. The answers in each specific instance will depend upon the location involved, the insurance philosophy of management, financial position of the utility, and many other elements of a strictly individual company nature.

THE purpose of this article is therefore threefold: (1) to direct the attention of the electric generating and distributing industry's management to this timely subject, (2) emphasize the need of a current review of the hazards, exposures, and protection measures available, and (3) set forth the basic elements and the steps involved in such review. It is thus limited to an analytical presentation of basic elements involved, protection measures and insurance coverages available, and fundamental considerations which should be reviewed and evaluated by the individual utility in its survey of this problem. Its aim is to arouse interest and provide management with a general pattern which may be followed in reviewing the subject.

In general the problem of relating the hurricane hazards to the insurance program involves a careful study of the individual utility's position which it is suggested can best be made through a program of exploration conducted along the following lines:

(a) Re-evaluation of the hazards presented and their relationship to the properties involved.

(b) Re-exploration of practical preventive measures available to reduce the effect of the hazards.

(c) Redetermination of the availability and cost of insurance protection against the exposure to loss, from which a decision to purchase insurance protection or self-insure the risk can be made.

The Hazards Involved as Related to the Property Exposed to Loss

IN general, hurricanes can cause two types of damage to physical property: (a) windstorm damage; (b) water damage resulting from waves, tides, rising waters, and floods.

The term "cyclonic winds" is used to designate the movement of large masses of air traveling from high- to low-pressure areas and technically includes tornadoes and hurricanes. However, in evaluating the windstorm hazard a distinction must be made between mere cyclonic winds of high velocity, tornadoes, which are cyclonic winds of extreme velocity over a very narrow area, and hurricanes which are cyclonic winds with a velocity of 75 miles per hour or more over a wide area. This distinction is particularly important in the case of an electric generating and distributing company because the hazard presented to its various types of property is considerably different with respect to ordinary windstorms than for tornadoes and hurricanes.

Weather Bureau records coupled with loss experience will normally give a clear and quite reliable picture of the potential hazard from high winds other than tornadoes and hurricanes. Thus, the extent of probable loss from mere high wind damage can be fairly accurately established for comparison with the insurance premium requirement.

The exposure to tornado and hurricane loss is, however, more difficult both to determine and to evaluate, for although statistical experience indicates the locality of probable occurrence, the frequency of occurrence, and the extent of the damage to be expected, experience also clearly indicates that the past cannot be fully relied upon to predict the future.

AS an example, the middle and middle southern sections of the country are generally regarded as the regions where tornadoes constitute a very real exposure to loss. However, although statistics bear out this conclusion, the following listing of major tornado storms occurring during early 1953 readily indicates that the tornado loss exposure cannot be ignored in other sections:

¶ "IN *purchasing windstorm protection under the extended coverage endorsement, the insurance buyer should carefully note the exclusions from coverage which apply. Normally, these exclusions apply only to crop silos, windmills, and similar objects, which would not affect the coverage for a utility. In some jurisdictions, however, metal smokestacks are among the objects excluded and these, in a particular instance, might be of considerable importance to a utility.*"

Location of Tornado	Extent of Damage: Deaths	Extent of Damage: Property Damage
Texas	141	$61,000,000
Nebraska	16	2,000,000
Iowa	1	3,000,000
Illinois	1	4,000,000
Michigan	122	12,000,000
Ohio	18	4,000,000
Alabama	15	4,000,000
Georgia	21	65,000,000
Massachusetts	85	75,000,000

Weather Bureau statistics covering the period from 1916 to 1950 record tornado occurrences in every state in the Union and the District of Columbia. On the average over this period, 148 tornadoes occurred in the continental United States each year, causing 227 deaths and property damage of $13,622,226. Since the property damage figures are based upon estimates at the time of occurrence, it is obvious that the amount would be considerably higher if converted to present-day levels.

LIKEWISE, tropical hurricanes are associated to a great extent with the southern tip of the United States across Florida, Alabama, and Louisiana, and history indicates that damaging storms of this nature occur north of Cape Hatteras only at comparatively infrequent intervals. In fact the official mappings of principal hurricane paths include only this southern area as being in the principal world regions of tropical cyclones. As indicated above, however, three hurricanes of major force invaded the northern Atlantic area within a 6-week period in 1954. It has recently been estimated that the property damage inflicted by these three hurricane storms exceeded the total damage of all tornado occurrences in the United States in 1954.

It is therefore clear that the tornado and hurricane proneness of the locality cannot be entirely relied upon in evaluating the loss exposure.

Although tornadoes and hurricanes have a common characteristic of unpredictability as to time and place, they present somewhat different hazard potentials from the viewpoint of an electric utility company because of the different types of property which each subjects to loss.

The major concentration of an electric utility's property values normally lies in its major generating stations and equipment. Generally speaking, these plants are constructed to withstand considerable windstorm exposure without appreciable damage so long as the windstorm is of the high velocity cyclonic or hurricane nature. They are not, however, normally capable of withstanding a tornado which often involves wind velocities estimated from 350 to 500 miles per hour. The damage created by a tornado is usually total to property in its direct path. Even these sturdy generating properties are therefore vulnerable to tornado destruction.

THE normal electric utility usually also has considerable property values invested in warehouses, storage stations, office buildings, and the contents thereof. Property in this category is normally subject to damage or destruction from any windstorm of velocity abnormally high to the locality. The greatest exposure to loss in this type of property is found in unanchored roofs or in improperly installed or poorly maintained roof covering. In addition, windows are subject to breakage and walls subject to collapse, as a result of which contents and interior furnishings may be damaged or ruined.

Last but not least among the exposed properties are the valuable and important

Estimating the Hurricane Risk

". . . this is an opportune time for insurance buyers and others responsible for the safeguarding of business assets to carefully re-evaluate the exposure of their concern's physical properties to the hazard of hurricane loss. Reconsideration of this feature is especially important and timely for electric generating and distribution companies. These utility companies have recently witnessed considerable growth of their facilities and now own extensive properties both old and new in the form of generating plants, warehouses, office buildings, and similar structures, which represent a high concentration of values and are often located in a position particularly exposed to the perils presented by hurricane hazard."

transmission lines. These lines, extending over all types of terrain and openly exposed to the elements of nature, are the most vulnerable of all of the utility's properties, particularly to windstorm damage.

Evaluation of the exposure to damage due to waves, tides, rising waters, and floods accompanying a hurricane must be based on the location of all of the utility's various properties. While the hazard is increased by nearness to large bodies of water and consequent exposure to damage by waves and tides, the element of hazard in the rising of rivers and streams as a result of rainfall accompanying a hurricane cannot be overlooked.

THE damage which can be created by tide and wave is similar to that above discussed with respect to the windstorm potential of tornadoes. Along the Gulf and South Atlantic coasts the tides created by

hurricanes have ranged from 10 to 16 feet above normal. On the whole, greater loss of life and property damage have been attributed to water damage than to the force of winds. Much of this damage is caused by debris of destroyed structures carried forward by wind and water. Even the strongest of structures are, however, subject to complete destruction if the water succeeds in undermining the foundations.

Rainfall in a tropical hurricane has exceeded 23 inches in a 24-hour period in at least one instance in the United States. It is obvious, therefore, that a substantial exposure to flood damage exists even in inland regions far removed from ocean or lake front. Furthermore, flood damage may be created at a distance hundreds of miles from the area of the abnormal rainfall through rivers and streams running therefrom into other regions. It is thus evident that properties in any locality, even though far removed from large bodies of water and from the central path of a hurricane, may be seriously damaged by rising waters resulting from the hurricane occurrence. Thus geophysical characteristics of location of particular properties, such as nearness to streams or flood areas, elevation, and similar items are important in evaluating the potential hazard.

Preventive Measures to Reduce the Effect Of the Hurricane Hazard

HAVING evaluated the extent of the exposure of its physical properties to loss from the two major elements of the hurricane hazard, wind and water, the electric utility must next consider the loss preventive measures which it can make use of in order to reduce the effect of the hazard.

It is readily apparent that the windstorm hazard can best be protected against by building new structures to a wind-resistive strength in keeping with the highest recorded wind velocities in the locality and allowing a substantial margin of safety. A second preventive measure lies in strict maintenance of all structures and immediate detection and repair of any conditions which will contribute to the susceptibility of the structure to windstorm damage.

In this respect it is worth noting that the principal wind damage losses in the recent hurricanes have been attributed to unanchored or poorly maintained roofs. Damage of this type also results in considerable damage to interior properties, which would otherwise have remained unharmed, by the admittance of rain, breakage of sprinkler systems, fires, and other results of internal wind damage.

PRACTICALLY all constructors of utility properties are now well aware of the importance of building to wind-resistive strength in the locality of the plant and allowing an appreciable margin of safety. This might not have been so universally true a number of years ago, and in reviewing preventive possibilities the utility should look carefully at its older properties, both from an original construction and subsequent maintenance standpoint. Furthermore, certain properties used for warehouses and similar purposes have often been purchased or are rented from others. Since lack of proper wind-resistive construction or poor maintenance even befor the utility came into possession of the property will contribute to the possible damage to the utility's property stored therein, the current condition of these

buildings should be reviewed with extreme care.

SINCE the science of weather prediction and radio and television communication facilities have reached the stage where considerable warning of approaching hurricanes and timely advice on any change in course or intensity are readily available, much of a loss-preventive nature can be accomplished by organization and training of employees in the science of preparing for an approaching storm. Orderly and thorough attention to all windows, doors, and other openings which would admit wind or water, removal to cover of all portable objects, removal of hanging signs, and the boarding up of vulnerable glass windows will contribute much to reducing the loss potential of the storm. Likewise, employees should be acquainted with the fundamentals of the behavior of hurricane winds so that organized and scientific protection of properties can be maintained throughout the duration of the storm.

In general, the same precautions of erection to wind strength and careful maintenance will contribute materially to reducing the windstorm loss hazard with respect to the vulnerable transmission lines. In this category careful check upon the strength of poles, security of guy wires and keys, and condition of crossarm supports are of importance. Of probably greater importance, however, is the matter of trimming or removing trees so that they cannot be blown against the lines of poles. Likewise, the removal of brush and undergrowth to permit ready access for repair or damaged lines and prevent the spread of fire will contribute materially to reducing the amount of loss if a break in the lines occurs.

PREVENTIVE measures to reduce the water-damage hazard may also be taken through the media of construction to strength and careful and proper maintenance of properties. Flood, tide, and wave, however, have certain limitations of action imposed upon them by the element of elevation. These limitations afford opportunities of prevention which are not available in combating the windstorm hazard, which has no practical natural limitations.

Considerable reduction of the water-damage hazard can be realized by locating new properties, in so far as it is economically possible, in places of high elevation and away from bodies of water or streams. Likewise, in purchasing or renting properties in which valuable merchandise or equipment is to be stored the element of flood, tide, or wave exposure can be given due consideration.

Even in connection with older prop-

¶ "SINCE *the science of weather prediction and radio and television communication facilities have reached the stage where considerable warning of approaching hurricanes and timely advice on any change in course or intensity are readily available, much of a loss-preventive nature can be accomplished by organization and training of employees in the science of preparing for an approaching storm.*"

erties located in an area of water-damage exposure, much can be done to reduce the effect of the water-damage hazard by the construction of dikes or utilization of canals to take advantage of the elevation limitation imposed upon water by nature. These same elements can also, of course, be used in constructing new properties where economic and other practical considerations dictate location in a place of indicated flood, tide, or wave hazard exposure.

Last but not least in this stage of the evaluation, it must be borne in mind, as we shall later develop, that where insurance protection is most needed against the water-damage hazard it is normally not obtainable, or at best only at a prohibitive cost. Therefore, preventive measures become of utmost importance as the first (and usually last) line of defense against damage or loss of properties from this hazard.

Arranging Insurance Protection against The Hurricane Hazard

HAVING evaluated the hazards involved, related these hazards to the properties of the utility, and developed available measures to reduce the hazard, the next step in the adjustment of the insurance program is consideration of the purchase of available insurance coverage to protect against the remainder of the hazard which cannot be reduced to a degree which will warrant self-assumption of the risk involved.

As respects the windstorm hazard, the utility will normally find that insurance protection for properties other than the transmission lines is quite readily available, although the premium rate for such coverage will vary on the basis of the windstorm damage history of the particular section of the country in which it operates. This coverage is provided by insurance companies either under a specific windstorm policy, designed primarily to insure against this hazard alone, or by means of an extended coverage endorsement attached to the fire insurance policy. In recent years there has been a distinct trend away from the windstorm policy and toward providing this coverage under the extended coverage endorsement, which in addition to the windstorm hazard also provides protection against hail, smoke damage, riot and civil commotion, riot attending strike, aircraft and vehicles, and explosion. It may therefore be found that the only basis upon which the insurance companies are willing to insure the windstorm hazard is under the extended coverage endorsement attached to the fire insurance policy. In such instance, to obtain the insurance against the windstorm hazard it is necessary first to carry fire insurance on the properties under consideration.

As indicated above, the premium cost for this coverage, which must be carefully evaluated against the exposure presented in the particular instance, will vary according to sections of the country and will normally be greater in seacoast areas than in inland areas. The premium requirement for this coverage will, however, generally be found to be equitable.

In purchasing windstorm protection under the extended coverage endorsement, the insurance buyer should carefully note the exclusions from coverage which apply. Normally, these exclusions apply only to crop silos, windmills, and similar objects, which would not affect the coverage for a

utility. In some jurisdictions, however, metal smokestacks are among the objects excluded and these, in a particular instance, might be of considerable importance to a utility. Where this exclusion exists in the basic form, arrangements may be made to include the metal smokestacks for the payment of an additional premium.

It is also important to remember in all instances that the windstorm coverage excludes damage caused directly by ice (other than hail), snowstorm, sleet, waves, tidal wave, high water or overflow, whether driven by wind or not.

In connection with the transmission lines, it will generally be found that insurance coverage against the windstorm hazard is either unobtainable or obtainable only at a prohibitive premium rate. The cost of coverage on these properties will also be increased by the fact that most utility companies do not carry fire insurance on their transmission lines. Thus, in order to obtain the windstorm damage protection under the extended coverage endorsement, it would be necessary to first initiate fire insurance coverage. Therefore, when the fire and extended coverage rates are applied to the high values of the transmission lines, and the resulting premium requirement evaluated in terms of the exposures involved, it will usually be found uneconomical to purchase coverage for this portion of the utility's properties.

The reason for this circumstance is that in the past neither fire nor windstorm insurance on transmission lines has been widely purchased by utility companies. Accordingly, there has been an adverse selection against the insurance companies, since only those risks in high-wind hazard areas will normally contemplate the coverage. Thus, since only the risks of greater exposure have been insured or are potential markets for the insurance, any loss experience which has been developed has been adverse to the insurance companies. This has resulted in the requirement of high rates and a general reluctance of insurers to write the coverage even at these higher rates. If the situation were such that all transmission lines in the country were insured, the resultant spread of risk over both good and bad areas would very likely result in the development of experience which would warrant the providing of the coverage at an equitable rate.

With respect to the exposure existing from the hazards of tides, waves, rising waters, and floods caused by the hurricane occurrence, the utility company will normally find that a condition similar to that discussed above in connection with obtaining windstorm insurance for transmission lines exists with respect to practically all of its properties. In this instance, however, both the unavailability of the coverage and the extent of the excessive premium requirement in sections where the hazard is appreciable, will be found to be even more pronounced. The reason for this condition, as in the case of the windstorm coverage for transmission lines, is that there is a demand for the coverage only in regions susceptible to the water-damage hazard and little demand in regions where historically the hazard is very small or nonexistent.

Therefore, in this instance also an adverse risk selection against the insurance company exists and has resulted in an extremely limited insurance market and high premium requirements.

Summary and Conclusions

ON the basis of the above, the following conclusions can be reached with reference to the importance of the hurricane hazard to an electric generating and distributing company and the part that it plays in the over-all insurance program of the individual utility:

1. While the recorded history of hurricanes and tornadoes, establishes definite patterns of frequency in various regions and the normal paths which these occurrences follow, these historical indications cannot be regarded as conclusive proof that in a given locality there is complete absence of the hazard and exposure to loss.

2. On the basis of history a utility company located in any part of the continental United States must conclude that its various properties present an appreciable exposure to loss from the windstorm hazard arising from high cyclonic winds, tornadoes, or hurricanes.

3. Although some of a utility's properties, such as its main generating stations, are very strongly built and will normally resist both abnormal windstorm and the water damage of waves, tides, and floods, they are still susceptible to loss from the extremely high-wind velocity of the tornado if the plant happens to be in its direct path and to destruction under extreme conditions by the undermining of the foundations by wave, tide, and flood.

4. In connection with all of these hazards, much can be accomplished by preventive measures in the form of careful selection of the location of properties, careful maintenance, and the training of employees in loss-prevention methods in combating the actual storm.

5. Insurance protection against the universal windstorm hazard is normally obtainable for properties other than transmission lines if preventive measures in the form of structural soundness and careful maintenance of properties have been followed.

6. Insurance against windstorm damage to transmission lines and damage caused by wave, tide, and flood for all of the properties is usually either unobtainable or purchasable only at an exorbitant premium rate. This accordingly increases the responsibility of the utility for exerting all possible efforts, in the direction of preventive measures, to reduce or eliminate so far as possible the exposure of its properties to loss from these hazards.

"SECRETARY of the Interior McKay recently denounced the most dangerous and destructive of all monopolies—government monopoly. He said: 'In other parts of the world today this philosophy of government monopoly has created a living nightmare for hundreds of millions of unfortunate people.' In the same speech, the Secretary said that one of the great conflicts of the present lies between the philosophy which supports ownership and development of our natural resources in the traditional American way and one which 'presses constantly for expansion of an all-powerful federal bureaucracy. . . .'"

—EXCERPT *from Industrial News Review.*

The Employee's Rôle in Public Relations

Employees can aid measurably in creating favorable public climate for the operation of investor-owned utilities, providing management sincerely wants them to do something about this situation. Past disinclination to speak out with definiteness to the public has been one of the great deficiencies of the national public relations effort.

By KIMBALL I. JACK*

THAT consistent employee contacts over the years—friendly words and willing human hands—benefit the cold business organization, few will deny. Time and again over the nation utility executives are made justifiably proud by consumer appraisal, in effect: "Employees are always doing something nice for somebody. It's a fine utility to do business with."

The theory of good-will building through employee effort, verified by numerous reports, is again supported in the Washington Water Power Company service area, Spokane, Washington, where the percentage of population favoring the utility, after six years' programing, has spectacularly changed for the better. According to most recent survey figures, 98 per cent of residents agree that Washington Water Power Company personnel are courteous, prompt, and co-operative. Electric rates, say consumers, are reasonable; and in other respects the company is satisfactory to do business with. Today, this northwest utility, located in a hotbed of public power and harassed over the years, is recognized as a desirable segment of its communities. In short, a high level of public relations has been achieved.

*General sales, promotion, and information manager, Washington Water Power Company, Spokane, Washington. For additional personal note, see "Pages with the Editors."

So far so good.

Yet, despite public acceptance of the company and its policies, there exists in Washington Water Power Company experience, and perhaps with all other utilities in America, a situation that merits review and should not be ignored. That situation is indeed a paradox. For while the public smiles favorably at the utility and its employees, the fact remains that public alliance will not stay put. With apparent unconcern, Miss Public throws winsome glances at candidates for political office, legislative proposals, petitions, and causes which shockingly oppose the well-being of the utility.

TIME and again customers vote preference for private operation of their electric company. They profess to pollsters deep approval of private management and urge utility personnel to join hands in innumerable community projects. Yet, in the same breath, the public gathers in chocolate-coated proposals favoring public power.

Agreeing that private management constructs dams with greater dispatch and economy than government, these same customers, harassed with nigh-unbearable tax burden, approve more and more costly federal dam building.

Duplicating transmission lines, REA appropriations, preference clause, public power tax exemptions, federal aid to education, high dam at Hell's Canyon, interstate compacts, TVA, conservation, and scores of other issues leave public loyalty swinging like the pendulum on a clock. Public power and private enterprise, tacks and taffy, nestle in consumers' hearts cozily together. The mirage they recognize with logic and considerable horror, and at the same time accept the shadowy roadway leading to Socialism as tangible, pleasurable, and real. To our amazement, it is like expressing strong desire to retain one's feet and concurrently granting amputation of both legs.

Why do consumers swallow these incompatible items—hook, line, and sinker —and digest them? Why do people hate Socialism, yet elect legislators advocating propositions that lead to Socialism?

It may be that the public is fickle, just as a beautiful woman can be fickle. Perhaps two loves merit the consumer's attention at one time, a dutiful stand with intent to reform. Perhaps the public has achieved the "one world" viewpoint, a lordly plane in stratosphere above prejudice, while utility folk, God-fearing though they be, are less tolerant. Or to be more realistic and honest about it, perhaps serious implications are involved which invite us to review several aspects of the Washington Water Power Company's employee-public relations program, and reach a conclusion, letting the chips fall where they may.

SIX years of employee programing (though the cost has been unbelievably small) is a long time. So where did the utility stub its toe? Surely the Washington Water Power Company stands not alone in its dilemma. In which course did Miss Public flunk her exams? Where did our public relations advisers miss the boat? What in the future will deter Miss Public's entering the madhouse of inconsistency? That is the problem.

If Washington Water Power were starting its public relations program tomorrow, past experience throws into relief certain basic elements of employee par-

ticipation. It may be worth while to discuss them.

For example, effort to win consumer alliance through employees is a futile thing unless management indicates desired action. The example of top executives is needed not so much to show how, when, and where, but rather to prove that *something should be done now.* Most people are followers, not leaders. Wise mental researchers have put the percentage of leaders under the figure five. That leaves dozens, thousands, millions of people unconcerned, regarding vital issues that have only indirect bearing upon their well-being. Marginal encouragement from management means at best executive toleration. It is like maneuvering a race horse from the grandstand, and seldom impresses the horse.

IF we can believe discussion over the post-convention highball, thousands of employees over the nation have not been told whether or not management wants them to save the electric industry. They do not know if private industry intends to fight now or will drift along, awaiting a time many consider too late. It is said that management usually has the right aim—survival over Socialism—but often fails to pull the trigger.

"The time to strike is not now," sounds a dim policy echoing back over the years. "We must proceed with caution," is the wet blanket that chills employees' bones. "The electric industry is different," top officials say. "We have too many rugged individualists, and none is able to speak for all." Quite reasonable are these explanations from management's viewpoint, but to the employee and many of our allies who see the suspended executioner's ax, they are excuses overworked and threadbare.

GLANCE at the medical profession by way of comparison. The medical group stands united against federal encroachment. Doctors in the community, regardless of special service needs, concede not one pill administered by the hand of government, one headache powder, or the amputation of one toenail. Even a little Socialism is not wanted. There is no compromise in the medical profession.

And the question is asked, now that we discuss leadership—does that same unity exist to guide employees in the electric industry? Is the preference clause tolerated in one section of the nation, while elsewhere the law emerges mean and ugly? What about federal dam building? Are Hungry Horse, the TVA, PUD's, expanded REA, and other symptoms of public power here to stay? Is it urged in some

¶ "ACCORDING *to most recent survey figures, 98 per cent of residents agree that Washington Water Power Company personnel are courteous, prompt, and co-operative. Electric rates, say consumers, are reasonable; and in other respects the company is satisfactory to do business with. Today, this northwest utility, located in a hotbed of public power and harassed over the years, is recognized as a desirable segment of its communities."*

sections that working arrangements—a partnership agreement among all groups, federal, municipal, and private — be adopted for the common good? What about utility viewpoint in other areas of the U. S.? Is federal participation bitterly denounced? What about flood control, taxes, steam plants, national advertising, contacts with schools, legislators, newspapers, defensive-*versus*-offensive action, etc.? Do we have agreement?

ADMITTING that conditions over the nation differ, and that sound local action to hold the line at one point has important impact upon private industry in general; assuming, too, that thanks to congressional investigating committees bent upon destruction to private operation, certain utility leaders are more or less silenced, the fact remains that as the years go on, public power seems to learn more, talk louder, and our customers apparently hear better. We save a plant, but lose the public. And whether utilities are busy or quiet in the field of customer opinion, noisy propaganda of the socialist group, with increased volume, continues on.

It is no wonder that employees often fail to carry freedom's flag in everyday practical language. They have not been told what to say. How can they project a viewpoint if they do not have one? How can they grow zealous in a consumer information program when they have not been given a consistent, nation-wide doctrine to stand by?

Employees of Washington Water Power, Florida Power, Connecticut Light, or elsewhere, may be given local viewpoint, but headlines reprinted from other sections confuse the issue, to say the least. Solidarity of the electric industry has been seriously weakened by disagreements over the urgency and variety of national objectives. And it seems reasonable to conclude, in the face of northwest program results, that the public will be confused as long as the electric industry itself is confused. United leadership is needed more than ever before.

BUT suppose Utopia does arrive on an early train. Suppose the entire utility industry stands pat regarding various attitudes now in controversy. Passing along management's viewpoint to employees, and hence to the public, is another important element that merits critical attention in public relations planning.

Communication between management and employee, according to Washington Water Power experience, appears to bring best results by personal contacts. The company president who will visit with his workers, pointing out reefs ahead and the safe harbor, recognizing employee abilities and loyalty, plays winning cards that cannot be matched. Department heads and key personnel are a second choice when the president is otherwise occupied.

Some advisers recommend that instruction follow organization lines, with each supervisor trained to handle his own section. But Washington Water Power experience shakes the head skeptically over that one. Mill-run personnel are seldom reached effectively through "one of the boys."

Practically every device and stunt in the book has been tried in the Pacific Northwest, but six years of careful experiment do not support the claim that supervisors bring in the best score. It's top management carrying the colors every time.

Public Relations Planning

"PASSING along management's viewpoint to employees, and hence to the public, is another important element that merits critical attention in public relations planning. Communication between management and employee . . . appears to bring best results by personal contacts. The company president who will visit with his workers, pointing out reefs ahead and the safe harbor, recognizing employee abilities and loyalty, plays winning cards that cannot be matched."

The trouble with supervisory instruction lies not so much in attitude as in the realm of aptitudes and time. Wholly occupied with details of the job, supervisors often have little time, much less inclination, for the extra burden of teaching customer relations. It was not uncommon for Washington Water Power to bring supervisors to a central point for training, and prepare lesson slides, dialogues, printed messages, panel questions, and memory quizzes about rates, with prizes dangling for bait.

BUT results seldom varied. Once back home, the supervisor discussed safety, construction, credits, collections, and parking problems, while the preference clause, co-operation with company allies, utility taxes, good service, public power rates, etc., were more often than not diluted or ignored. Instances came to light wherein employees on the payroll for ten months finally learned the supervisor's well-kept secret, that a public relations program was in progress. "Why can't our department attend these meetings?" employees asked. "What must we do to enter the good deeds' contest?" For reasons best known to the experts, supervisors who invariably gave good conscience to duty often regarded the assignment of making friends superfluous.

EMPLOYEES gathering in large groups to review company problems, according to Washington Water Power's experience, had the advantage of inspiration. Mass man tends to add pressure to his neighbor. Large assemblies, because emotional elements predominate, are an essential part of employee information programs. Another by-product of the mass audience is that the occasional objector, the sour puss, is swallowed up in the crowd.

Small groups, on the other hand, claim assorted advantages, including the all-important items of discussion and repetition, which end always on firmer ground.

Compromise between the two size groups, the many and the few, is the out-

come. Washington Water Power chooses to hold several meetings each year of general nature, bringing together a cross section of employees from all departments. On such occasions, management contributes undiluted viewpoint to the entire personnel. Interim meetings, designed to measure local progress and to invite reports on participation, were conducted by the supervisor. This was found to be the ideal arrangement.

Many devices lighten the load of employee communication. The coffee break in a large meeting permits employees to exchange viewpoints with management. Employee panels, pinpointing specific questions, both entertained and instructed. Memory games avoiding personal chagrin, courtesy films, carefully rehearsed skits also scored high in Washington Water Power's experience. Colored-slide presentations and tape recordings, on the other hand, usually flopped dismally, regardless of who handled them.

Spontaneous employee committees selected to outline specific areas of procedure generally ended in a tangle of organization lines, with bitterness and confusion rampant. Employees organizing themselves into numerous small work committees selected titles, report forms, and rules of order, and accomplished little more. The spirit was willing, but flesh lacked something to do. Employees failed to make progress because they lacked a well-laid-out plan.

USE of the telephone was another disappointment. Telephone reminders invited impertinence on one end and embarrassment on the other. Bulletin boards plastered about like pumpkins in the field did not produce action, but died on the vine. Desk reminders, like appeals to home addresses through the mail, were critically received as wasteful, while printed literature—that copious, weasel-worded, voluminous, interminable river of eyestrain which fills the nation's wastebaskets with ponderous reading matter, seldom understood, seldom taken from the envelope—impressed only the authors. If supervisors occasionally are the bottleneck retarding the flow of ideas, then printed literature, with few exceptions, is the crowning cork.

ASSUME, however, that management wants something done, and adequate staff and media are set up to insure that the desired viewpoint reaches employees. The third step in consumer understanding must define both topics for study and action desired, a major headache both locally and nationally. Leave the decision of subject matter to employees themselves, and one thing is sure—they will avoid controversy! They invariably choose the easy way that detours conflict for themselves.

For example, take a shy employee, totally inexperienced on the stage, who acts the clumsy comedian because he believes such participation will improve public relations for the company that employs him.

Take the graduate engineer who submits all day to village guffaws and buffoonery while shining shoes at $1 per pair to help local charity. He explains that improved public attitude for his electric company will be the by-product.

Take the meter reader who devotes fifty evenings a year to youth activities; the billing clerk and steno who don work clothes on Saturday to construct a playground for an orphans' home; the ac-

countant who nurses a Boy Scout troop to recognition; the lineman whose borrowed bulldozer scoops out a community skating pond; maintenance men traveling from town to town on their own time conducting community pancake feeds; the bookkeeper who organizes a toy drive, and so on.

IT is this sort of thing that employees can and will undertake with no fear of customer resentment or embarrassment. So Washington Water Power Company employees, over the years, piled up literally thousands of friendly incidents in the simple belief that by their effort the company's standing in its service area would be improved. Theirs was strictly a voluntary effort. Virtue was its own reward, with friendly customers the outcome.

But is a friendly public sufficient for survival? Can the utility outlive its enemies in our era of vicious, cut-throat competition, without appealing to the head as well as to the heart? What has the utility gained when pollsters report 70 or 90 per cent of consumers favorable to private operation, when the same consumers vote for a valley authority, or a public utility district which in time will destroy the utility?

At this point, the Washington Water Power Company, like many other utilities, hesitated at the high wall of indecision. The issue boils down as follows: Should the salesman, the meter reader, billing clerk, and others be invited to go one step beyond friend making and grasp the cold, sharp sword of propaganda and strike out in behalf of the company?

THIS question is not new. It has bobbed up repeatedly over the years, and arguments for and against offensive action are both amusing and impressive. Laws in some states under the New Deal were introduced and voted upon. Left-wing legislators, pounding the table, cried that this is not Russia—that workers have the right to their own opinions, and no employer should propagandize them.

In the next breath, however, it is noted that the same advocates of public power so vehement in decrying private business activity, proceed with their own propaganda, urging with fanatic zeal the acceptance of public power. "Benefits of local control," "new industries," "power at cost," "elimination of greed and profit," "treason of private operators against rural electrification," "waste of natural resources by private management," "power belongs to the people," "big dam construc-

". . . most employees will not participate in a public information program. Some other means must be found. Most employees do not like to talk. They are wallflowers in the arena of persuasion. They were hired to work, not to argue. They shun the soapbox and controversy as Grandma shunned sin. Their contribution to the firm is a day's work and good citizenship. Except for scheduled sales contacts, plus a few argumentative dispositions inclined to voice opinions, our employees from a practical viewpoint will give only meager help. They are not the answer to our political problems."

tion can be financed only by big government," etc., etc. These are some of the appeals flooding the nation by these shrewd advocates of classless society.

TIME and again, congressional committees, often limited to two or three bilious members in attendance, have ranted and raved at private utility efforts to save the industry from extinction, and at the same time secretly condoned PUD lobbies, labor union blasts, TVA, and other verbal abuse, which smack so strongly of communist methods they aren't even funny. Which is the pot and which is the kettle? What court would deny private business the same privilege of free speech claimed by public power?

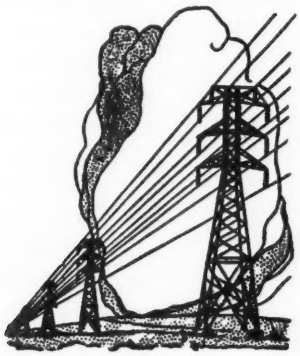
Take, for example, the reported $75,000,000 spent annually by the Truman administration to convince the population that Socialism is not Socialism, but democracy, and that what ordinary folk heretofore considered "left" was in fact right. Recall instruction sheets of the Bonneville Power Administration to its organization to harness public discontent and destroy private utilities. Consider the 71-page booklet issued by REA in 1949, carefully outlining ways to win a hesitant public.

Unfortunately, in early days of public power controversy, it was believed by private industry itself that name-calling was beneath the dignity of an electric company. "Let radicals blow off steam," it was advised. "Nobody listens to them anyway, and after all is said and done, free enterprise will survive." Utility advisers recommended what was termed "constructive story of utility contributions to the consumer." Taxes paid, generating capacity, elaborate diagrams of power plants, headlines about the good citizen in war effort, etc.—this was considered ample to keep the public informed.

BUT apparently the small public power seed we hoped would not sprout has expanded into a great forest of public misunderstanding. Gone forever are our days of peace. Gone are calm nights when sowing and reaping by private hands can be carried on without interruption. For an illy disposed neighbor, not considered in yesteryear's public relations plans, now would blow up the reservoir, loosen wild herds into fields in full flower, burn the grain at midnight, and all the while distort motives to make it appear that private capital was beating itself to death by neglect, avarice, and greed.

How else can we explain public opinion surveys showing our customers shockingly uninformed on nearly all vital issues? How else explain votes cast for political candidates who double back on election promises without public disapproval and further the two things customers fear most —Socialism and Communism? Whether we care to admit it or not, while private utilities have marked time, the persistent propaganda of public power is changing the thinking of America.

Theoretically, employees should be valuable in passing truthful information along to the public. In neighborhoods and communities they are trusted and well known. The volume of their acquaintances is impressive, reaching into every stratum of society. It is said that if two employees set out to repeat a juicy rumor to two other persons within fifteen minutes of the time they heard it, and these four people repeat the rumor to two other persons, and so on, the result, after a mere six hours



The Public Has Worries of Its Own

"RIGHT now it is doubtful if 10 per cent of the population could define the preference clause, or the partnership plan, or explain tax losses of the TVA. It is doubtful if more than a baker's dozen in each hundred are aware that private utilities are for or against a valley authority. The underlying truth is that people live by satisfactions and anxieties. Either we can provide them with sufficient data to bolster their old notions, or by fresh viewpoints we hope to create new anxieties to make them distrust public power. To date the electric industry has not created sufficient anxieties about TVA, valley authorities, tax inequalities, and other issues, even to identify them, much less to hold the line."

and forty-five minutes would include the entire population of the USA and Canada. A local utility with two thousand employees making only five contacts per day would in a year's time enlighten three and a half-million people. The grapevine invites everyone to swing on it.

THE monumental irony of arithmetic, however, is the fact that most employees will not participate in a public information program. Some other means must be found. Most employees do not like to talk. They are wallflowers in the arena of persuasion. They were hired to work, not to argue. They shun the soapbox and controversy as Grandma shunned sin. Their contribution to the firm is a day's work and good citizenship. Except for scheduled sales contacts, plus a few argumentative dispositions inclined to voice opinions, our employees from a practical viewpoint will give only meager help. They are not the answer to our political problems.

What, then, remains to be done?

Hesitant in debate, but strong in advice, employees reveal the sensible course we may pursue. They advocate what every successful politician knows by heart and

practices every day—kissing the baby on one hand and taking a poke at competition with the other. Good will, according to employees, is a two-way street. It is both offensive and defensive. It fights the battle from the trench generally, but on occasion it moves ahead. Pleasant though it be to lie on the sunny side in safety, sometimes it is necessary to swap lead. Now and then the utility must take off the gloves and in hard, cold words tell the public what is taking place.

Right now it is doubtful if 10 per cent of the population could define the preference clause, or the partnership plan, or explain tax losses of the TVA. It is doubtful if more than a baker's dozen in each hundred are aware that private utilities are for or against a valley authority.

THE underlying truth is that people live by satisfactions and anxieties. Either we can provide them with sufficient data to bolster their old notions, or by fresh viewpoints we hope to create new anxieties to make them distrust public power. To date the electric industry has not created sufficient anxieties about TVA, valley authorities, tax inequalities, and other issues, even to identify them, much less to hold the line. Hence the public dilemma. Old contentments are disturbed by enemies of the profit system who emphasize "loot stolen from the workers," "give-away administration," "greedy management," etc., while new anxieties and resentments do not retaliate. Private enterprise has not been sufficiently vocal in its reinforcements to reassure the consumer regarding past performance, nor has it created doubt regarding the enemy.

A questionnaire to Washington Water Power Company employees, seeking their views as to how the public may be enlightened, gave the following sage advice:

> Keep our Better Service program going, but somebody should give public power a hot argument . . . put it on the defensive the way it does us . . . the company president should not engage in a hissing match with opportunists, but someone high in the organization should answer public power claims and set the public straight . . . we should take a firm stand, using TV interviews, radio interviews, spot announcements about taxes, rates, preference clause, etc. . . . fancy radio and TV programs do not answer public power, so why use them? . . . train more company speakers to include a definite viewpoint about political issues in their talks . . . get these quotes into the newspapers and on the air . . . select editorials and thoughts against public power and reprint them in other publications. . . .
>
> Use movie theater slides and radio to invite customers into local offices for free literature on hot issues. Use movie slides to create interest in preference clause, but give answers elsewhere . . . invite students to use company libraries for speech and essay assignments . . . stop talking to ourselves in national information groups. If we'd throw away our mimeograph machines and reach more editors and leaders, we'd be further ahead . . . with several national conventions annually, why don't we get national speakers to put in a good word for us? . . . more plant tours, but be sure to brief each group in advance . . . stop talking about how wonderful is our new steam or hydro power plant. Neither can compete with a simple result like a baby. . . .

Do like the public power boys do—take credit for the good things in life. Public power makes people like them by saying they bring good weather, gravity, new industries, winning the war, electricity to the farm—everything . . . hire employees' wives on part-time basis to call on new customers with short message . . . etc., etc.

ARRANGING suggestions in more orderly fashion, we see activity on two fronts, as follows:

1. Lessening anxieties and creating favorable public attitude toward private utilities by emphasizing good things affecting the customer.

Private employees are friendly and co-operative.

Take-home pay and fringe job benefits surpass union standards.

Electric rates are generally lower than public power.

Future power supply can be provided more efficiently by private capital.

Private business has made America great.

Partnership and voluntary co-operation is the best way to get things done.

The electric company is a good citizen in the areas served.

Private utility pays higher taxes to aid government.

Stockholders are an important phase of local ownership.

Private utilities provide better service.

Private utilities bring in more new industries.

Private utilities make for greater prosperity.

Customers are helped through special services—as wiring, planning, heating, financing, care and use, etc.

Private utilities welcome new businesses.

Private power postpones and discourages Socialism.

2. Creating new anxieties and unfavorable attitude toward public power by emphasizing unsatisfactory things affecting the consumer.

Public power is a step toward Socialism.

Public power rates are often higher. (What happens to the "profits" public power promised to eliminate and return to the ratepayer?)

No regulatory groups have jurisdiction over public power.

Public power steals local control from the people.

Public power threatens as a dangerous monopoly.

Public power escapes taxes.

Public power blocs create power shortages by obstruction tactics.

Public power service areas lack normal growth.

¶ "ADMITTING *that conditions over the nation differ, and that sound local action to hold the line at one point has important impact upon private industry in general; assuming, too, that thanks to congressional investigating committees bent upon destruction to private operation, certain utility leaders are more or less silenced, the fact remains that as the years go on, public power seems to learn more, talk louder, and our customers apparently hear better. We save a plant, but lose the public. And whether utilities are busy or quiet in the field of customer opinion, noisy propaganda of the socialist group, with increased volume, continues on.*"

Many new industries fear locating in public power areas.

Public power is supported by Socialists, Communists, etc., who would overthrow the American government.

Public power supports most powerful political machines.

Public power weakens national defense.

Not cricket, you say? Scurrilous, dishonorable, low? Stooping to jukebox methods of the CIO? Tramping Christian principles into the dust? Breaking the Golden Rule? Failing miserably to do good for evil?

Maybe.

But on the other hand, as John Curran pointed out a hundred years ago: "It is the common fate of the indolent to see their rights become a prey of the active." Corporate progress, like individual liberty, rests upon the principle of action. It does not imply fear, denial, concealment, and wishfully waiting for the whirlwind to die down.

Many years ago, George Norris, utility hatreds incorporated, tossing his white mane, said: "I do not object to private utilities openly stating their position. What I object to, and always will object to, is the concealment of activity." This openness did not distract from his venom, however. Nevertheless, surely most of us would rather survive under the blatant haranguing of left-wing critics than be destroyed with their approval of our silence.

In conclusion, then, the capsule of customer understanding is simple. First, the chief executive must want activity. He must want it seriously enough to demand it. Second, employees can and should be induced with earnest effort to improve service and create a friendly climate for customer understanding to follow. Third, it is the staff officially representing management who will proceed with talks, TV interviews, radio messages, press releases, etc., to reach the public. In most areas, management and chief aids can make the front-page headlines whenever they care to.

It is management and the top staff who can best reach the public with things favorable to the utility and unfavorable to public power. In each case, the public will listen. With repetition locally and nationally, the public will remember.

If the experience of the Washington Water Power Company can be relied upon, and to this we add the experience of other utilities, then it is evident that problems of private industry are not solved. Thus far, the utility industry, at least on a national basis, seems to have fallen short of what was expected of it. Something more by way of public information remains to be done. Employees are helpful, but they cannot do everything. Whether the industry decides to wait patiently for the outcome, giving good service and reasonable rates in the meanwhile, with an occasional printed booklet about the newest power plant, or resolve to be more energetic and vocal against our enemies, only time will tell.

¶ "There *probably never has been a time when the bankers of the nation were so uniformly agreed. They are nearly unanimous in the view that this is going to be a good business year.*"

—S. Clark Beise,
President, Bank of America.

Automatic Phone Toll Ticketing Requires Special Handling

The telephone subscriber finds a new freedom in direct dialing, but can mysteriously run up a high toll bill. A new type of complaint that requires special handling.

By JAMES H. COLLINS*

RISING all over the land are these new telephone buildings that look like exchanges. Opening the door, you hear the cheerful metallic chatter of traffic.

But no traffic passes here. These are factories that process the perforated tape records of yesterday's traffic in a neighboring city, passing it through sorting machines that segregate the individual toll calls for each subscriber, to be added up and billed at the end of the month. They are generally built outside the congested area.

Automatic message accounting, automatic ticketing, bulk billing, and other terms are applied to them, and both Bell and non-Bell companies are busily installing them. They are alike in principle, and telephone people require no technical descriptions. For subscribers they bring a wider and wider range of dialing, leading up to direct dialing of all toll calls, nation-wide, Bell and independent. They also bring operating economies that are passed along to subscribers.

But for telephone people they pose some new customer problems.

Misunderstanding of automatic accounting by the public can lead to high toll bills, and result in complaints that are costly to settle. The public will have to go to school to learn new phone habits.

*Professional writer, resident in Hollywood, California. For additional note, see "Pages with the Editors."

"Ha! educational publicity—advertising, films, plant visits, automatic ticketing lessons for the kids in school," say the public relations experts.

But such publicity can stir up sleeping dogs. These new systems are being installed over a considerable period, and education is needed only in those areas where wider-range dialing is cut in. Too much publicity might stir up unnecessary complaints and inquiries, where normally, so far, there have been only a reasonable percentage, not burdensome to handle.

A private school is needed, for a limited number of complaining subscribers each month. It will be an expensive school, with the company paying all the fees. So the more exclusive, the better.

To get a little perspective, in the simple days of not so long ago, a telephone bill consisted of a flat rate charge for service all over town, plus long-distance calls, if any.

As cities grew, near-by toll areas developed, for which calls were placed through operators, who wrote tickets, showing phone numbers and time talked. These calls were itemized in bills. If a phone bill seemed high, and was questioned, the tickets could be produced for the subscriber's check, and usually satisfied him that the service had been used. These cases were not numerous, and were not expensive to the company. Such special cases cost a few dollars, and were worth it in good relations.

But automatic accounting and bulk billing bring complications. Toll calls are dialed direct and recorded by perforations in a tape, no tickets are written, a single line in the bill charges so many "message units." Suddenly he receives a bill so much higher than any he has ever paid before, that he wants to check it.

"What are these message units?" he asks. "Give me an itemized bill of my calls—we can't possibly have made that many."

There are no tickets. His calls are recorded among millions of others, in a piano-player-roll language which can be read, but at an utterly impossible cost.

So, the complaint, customer relations, accounting, and other departments have a new situation.

The majority of these customers, thus far, have been shown that their bills are correct; they have made the calls through misunderstanding of wider-range dialing, and do not err again.

Others demand proof that involves special monitoring of their lines, and this is expensive.

Finally, a stubborn customer, who does not like corporations anyway, may lay a complaint with the state regulatory commission, which will require still more expensive monitoring, and is dreaded.

If automatic accounting and bulk billing bring an unusual number of complaints, as they are extended, it will be a serious cost burden for telephone companies, something not provided for in rates.

Those are the sleeping dogs.

What has been the experience so far?

This kind of complaint almost invariably arises when the subscriber receives an abnormally high bill. He is charged for several times as many message units as ever before, and perhaps has his attention drawn to that accounting term for the first time. He assumes that there has been some error that the com-

pany will be glad to correct. He is not hostile, but wants to check this, with other household expenses, and if there has been careless use of toll service, to cut it down in his family.

In all but a very small percentage of these cases, the bill is correct. The subscriber has used the service. The first task of the complaint department is to prove it, and help him avoid abnormal bills in future.

Procedures differ, but tactful discussion with a complaint department representative, to explain automatic accounting and bulk billing, may be all that is needed. These recent improvements in telephone service may be news to the customer.

"What are these message units?" is a good opening question, and a comparison with kilowatts is effective.

If toast making, vacuuming, and running the many appliances in a home had to be ordered and billed separately, electrical service would be like telephone toll service. But the electrical meter registers it all in kilowatts, in your kitchen—you can read it yourself.

AUTOMATIC accounting and direct dialing reduce telephone calls to the same basis. Message units are the kilowatts, and the subscriber is asked to look into his phone directory and read the explanation that has recently been inserted there, which he has probably not noticed. It is rather a stiff technical exposition. The fact is, a good definition of "message units" is badly needed.

ALSO, the subscriber will find numerous new maps, which he may not have noticed, showing flat rate and near-by toll areas for his exchange, which show the spread of direct dialing, and which may have involved him in toll service. Operator has told him, "You can dial that number," when he asked for toll numbers, and may have given the impression that they had been put on flat rate.

"Why can't I have an itemized bill?" involves an explanation of automatic accounting mechanism, also highly technical, sometimes described in printed matter, but confusing, with its line-finders, selectors, perforators, sorters, assemblers, and what not. The customer is generally satisfied to learn that machinery begins recording numbers, times, and so on the moment he lifts his receiver and dials a toll number; watches the time; tots up the number of message units used—and keeps track of several calls simultaneously.

"How accurate is this machinery?" will

¶ "MISUNDERSTANDING *of automatic accounting by the public can lead to high toll bills, and result in complaints that are costly to settle. The public will have to go to school to learn new phone habits. '. . . educational publicity—advertising, films, plant visits, automatic ticketing lessons for the kids in school,' say the public relations experts. But such publicity can stir up sleeping dogs. These new systems are being installed over a considerable period, and education is needed only in those areas where wider-range dialing is cut in.*"

usually be the next question, and he is told that it has built-in trouble shooters, and is also subjected to frequent tests; that whenever there is any doubt about its record it calls a halt; that any doubtful call is thrown out, and perhaps several calls on either side; that there are very rare cases of error in millions of test calls, never any against the subscriber—it cannot overbill.

It has been found that many subscribers have more confidence in mechanism than in operator-written tickets. The latter have always scored high in correctly writing tickets, but they are human beings, and mechanization is entering daily life at so many points that it is accepted as improvement. Comparisons with other mechanisms are useful—the electric clock has been found simple and convincing.

With this background of automatic ticketing the customer can be led to make some inquiries in his home, to see if this abnormal bill has been run up in various unsuspected ways. This is a kind of detective work, with the customer as the cop; everybody is a suspect, and the "killer" is often as cleverly concealed as any in a professional mystery.

Have there been any special occasions lately that caused extra phone service? A wedding, a sickness, guests, workmen in the house?

There is an important time element here. For the bill covers a period several weeks previously, and people have forgotten their toll calls; they must be reminded, and asked to think back far enough.

"Oh, yes! that was the time Cousin Tillie was here on a visit, such a popular girl, boy friends all over, always on the phone, toll call or not—it could have been Cousin Tillie."

"That was when mother was laid up, and did a lot of phoning, but not so many toll calls. She understands direct dialing, and message units, yet here is this bill. Has anybody been putting in many time calls? Why, yes! There was no clock in mother's room, and she ran the house by telephone time. You mean to say those time calls are charged? Well, probably it was mother. Sorry."

Has the family moved recently, or any of its relatives or friends? Toll areas are changed, flat rate numbers are now toll, but can still be dialed.

"It's so convenient, Aunt Sue," says Cousin Tillie, "I don't have to call you through operator now, just dial you like any other call."

"But you still have to pay extra," warns Aunt Sue. "Bill says it's still a toll call, and he works for the telephone company."

And so Cousin Tillie is awakened by a thumping message unit bill.

Under the impression that they are talking flat rate, people run on, and on.

Or they still think of near-by toll calls in terms of dimes, as they were posted yesterday in the directories, and talk on and on.

Flat rate service included a liberal number of free message units, the equivalent of several hours' toll connections, before charges begin. Some subscribers use no more than the allotted number, or only a few more each month, and learn, through an abnormal bill, how they can pile up through a misunderstanding of the rules.

As direct dialing and automatic ticketing areas are extended, subscribers receive explanatory literature and maps, showing

New Merchandising of Telephone Service

". . . there is a definite popular feeling that telephone bills have become hard to check. In a recent survey of customer opinion, made in another utility field, people were asked whether they considered utility bills reasonable and accurate. Gas, electricity, and water were given a clean bill, but dissatisfaction was found with telephone bills, and the bulk billing of 'message units.' Automatic ticketing is part of the new merchandising objectives in the telephone business. It is self-serve, which is transforming other lines of business. The customer is given new inducements to buy, but must learn new telephone habits."

their flat rate and direct dialing toll exchanges, and operator calls. But maps are lost, printed matter is set aside for future study, servants, youngsters, and guests use the phone. Presently a large bill materializes, and then the subscriber is ready to look into things, and learn.

With tactful people handling complaints, helping the customer find out where he or his family have been at fault, a large number of these cases go no further. Complaint people require special training, and should be patient listeners. The customer disputes what he believes to be an outrageous bill. He assumes that operators have been careless in writing tickets. When he learns that automatic machinery has done the recording, he demands an itemized bill. He cannot possibly have used that much toll service.

To let him talk it out relieves pressure. It also uncovers misuse of service that may be responsible for his large bill. He admits that he has been at fault, and takes steps to see that it does not happen again.

His bill for message units will often

drop to nothing for a time, until he and the family learn how to use direct dialing.

WHILE there are no toll tickets that can be produced to show the customer where protested calls were made for the past period, it is possible to monitor his phone, if necessary. But that is where these complaints become costly.

First, automatic accounting tapes are gone over to see if the message units charged in the bill are correct. There is a human factor here—message unit totals are transferred from machine records to bills by clerks. If the customer's flat rate service is metered by automatic counters, these will also be checked, and they are written in bills by clerks.

If the company finds that the bill is correct, a representative may be sent to tell the subscriber so, and ask his co-operation in a little more detective work in the home. On averages, the customer is almost always wrong. There is a "killer" somewhere in the home, ingeniously concealed, everybody is a suspect, and the cop must be clever, and not get tough.

In one high bill case the subscriber was a newspaper editor, and the telephone complaint manager a pal. After these preliminaries had failed to disclose the trouble, they made a lunch date to talk it over. The editor is a nervous, gum-crackling fellow. He sat down at his desk and dialed a number, said "Sorry, wrong number," and dialed again, this time getting his party.

The telephone man was an interested observer.

"You've done a good deal of telephoning at home lately?" he asked.

"Yes—I was laid up with that sprained ankle, and ran things from there."

"You always let your finger ride back with the dial?"

"I believe I do."

"And get a good many wrong numbers?"

"Yes, and I think I'm careful."

"That is probably where your message units have been piling up. You have an expensive telephone habit. When you let your finger ride, it often leads to getting a wrong number. Unless operator is told, and asked for a credit, those wrong numbers are charged."

TELEPHONE habits are studied by the experienced investigator of these new high bill complaints, for as direct dialing is extended, they can be responsible for increased toll calls, and ingeniously concealed, as in this case of the high-strung newspaper editor. This "tic" of the riding finger, with its wrong number calls, did not show up in the telephone bills of a busy office.

But when he used his home phone, it was revealed. The home phone had recently been put on direct dialing; before that, toll calls had been placed through operators.

Occasionally a "gremlin" is detected in equipment, through a check in the subscriber's home. That was the case in a two-party line where one subscriber protested a high bill, and the other had no complaint—in fact, said his message unit bill seemed lower than usual for the particular month covered.

The killer here was the butler! Trouble-shooting check revealed an error in installation of the phones, by which calls for one party were charged to the other—but only in rainy weather!

Where trouble still eludes the investi-

gator the subscriber's line can be metered for a record of future traffic, a substitute for the tickets formerly produced when toll calls were made through operators. The subscriber is asked to keep a written record of toll calls, for comparison. Such a test is usually made over a short period, one month or less. Almost invariably the automatic ticketing shows more toll calls than the subscriber's written record, for the latter misses out calls, while the mechanism produces a record that cannot be disputed. It gives numbers called, times and message units, and is accepted as correct when checked by the family. It is valuable in convincing customers that the ticketing mechanism is accurate.

But such metering is costly, and would not be justified if it had to be done on a large number of complaints.

IF a stubborn subscriber, hostile to corporations in general, carried his dispute to the state regulatory commission, the company might be ordered to monitor his line.

"That would be bad," is the opinion of some customer relations people. "The publicity could be unfortunate, stirring up a flood of similar complaints; and the metering would be expensive."

"We think it might be good," say others. "The commission would almost certainly find the bill correct, and if the service was satisfactory, the case would end there. Publicity could be favorable, because the public would learn more about automatic ticketing, its accuracy, and the company's fair dealing."

So far, few complaints to commissions have been reported.

Some automatic accounting systems make it possible to obtain records of past toll calls, comparable to the old tickets, and companies offering such records to subscribers for a moderate monthly fee report few takers.

ON the other hand, there is a definite popular feeling that telephone bills have become hard to check. In a recent survey of customer opinion, made in another utility field, people were asked whether they considered utility bills reasonable and accurate. Gas, electricity, and water were given a clean bill, but dissatisfaction was found with telephone bills, and the bulk billing of "message units."

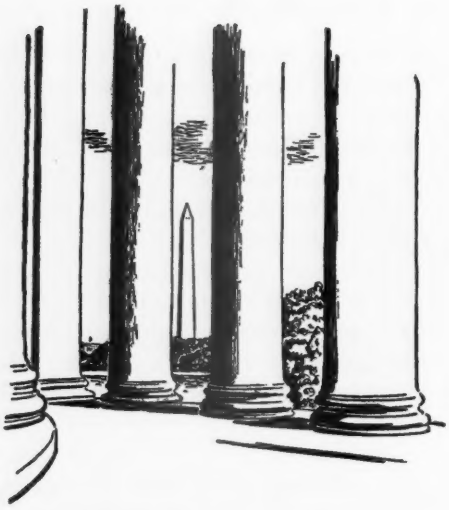
Automatic ticketing is part of the new merchandising objectives in the telephone business.

It is self-serve, which is transforming other lines of business. The customer is given new inducements to buy, but must learn new telephone habits.

Customer relations people have a new teaching problem—and something to learn themselves.

¶ *". . . the consequence to America of failing to insure a continuing supply of well-educated men and women would be to abdicate any hope of victory for the free nations in the world struggle for the minds of men."*

—ROBERT GORDON SPROUL,
President, University of California.



Washington and the Utilities

Dixon-Yates Wins Showdown Vote

WASHINGTON observers are inclining to the belief that the Democratic congressional leaders have just about shot their last real bolt, in their efforts to cripple the controversial Dixon-Yates plant for supplying AEC power via the TVA system. Following a hectic debate in the House of Representatives on June 15th, the membership, with almost solid Republican backing and much more than enough Democratic votes to swing the balance, reversed two recommendations of the House Appropriations Committee, which is heavily loaded with hand-picked public ownership proponents. The vote on the amendment to deny TVA funds for a steam plant at Fulton, Tennessee, was 196 to 169. Impressed by the size of their defeat, the Democratic leadership did not even risk a roll call vote, and abandoned any further effort to deny funds for the Dixon-Yates tie line.

The committee, in reporting out the $1,282,216,242 appropriation bill to finance public power, flood-control, and rivers and harbors projects, had defied the administration. The committee had refused to provide funds for a transmission line to connect the TVA system with the Dixon-Yates plant at West Memphis, Arkansas, by means of a transmission line crossing over the Mississippi. Instead, the committee had voted 23 to 19 to give the TVA funds for its own proposed Fulton steam plant in the amount of $6,500,000.

This decision was reversed on the floor following a personal appeal by President Eisenhower. While further efforts may be made to scuttle the Dixon-Yates program in the Senate Appropriations Committee, the previous voting records of the members of that committee do not indicate that the Democratic substitute will be likely to get a favorable report, although there will doubtless be some debate about it on the Senate floor.

FUND requests for other power agencies—Bonneville Power Administration, Southeastern Power Administration, U. S. Bureau of Reclamation, and Army civil functions—were nearly all cut by the committee. Southwestern Power Administration was given a $5,530,000 increase, restoring its "contingency fund." A re-

quest for more than $1 billion for the Atomic Energy Commission was reduced by $427,000,000, although carry-over funds bring the total amounts for AEC close to the President's request.

President Eisenhower's plea to restore funds for the connecting transmission line between the proposed Dixon-Yates plant and TVA was believed by administration forces to have swung the verdict of the House to reverse the action of its Appropriations Committee. The issue gave the House its first chance for a direct yes or no vote on the Dixon-Yates project, and the result was disappointing to Democratic political strategists who were counting upon it as a campaign issue.

Hoover Report on Public Power

THE well-publicized-in-advance Hoover Commission report on water and power resources was expected to recommend that rates charged by all federal power projects be raised to cover costs of private companies. The report was expected to suggest that the FPC set rates for agencies producing power in the same manner that it regulates rates charged by private companies. Rates charged by public agencies would take into account the federal, state, and local taxes which private companies now pay.

The report was also slated to recommend the creation of a water resources board to advise state, local, and private interests, as well as the federal government, on water and hydroelectric power developments. Congress would also be asked to declare as a matter of national policy that the federal government should undertake no power or water development project which private industry is willing and able to do. The report was not expected to include the recommendation of the task force headed by Admiral Ben Moreell, chairman of the Jones & Laughlin Steel Company, which urged that federal projects be sold outright to private interests.

Meanwhile, in St. Louis before a convention of the American Society of Civil Engineers, Moreell said bluntly that the federal government ought to get out of the electric power business. He insisted his comments and those of four other task force members at the convention were those of individuals and did not necessarily reflect what would appear in the task force or commission reports late in June. Moreell stated:

> Technically and financially, there is no present or prospective need for federal power activities. It is logical to conclude that no additional federal power projects should be constructed and that a start should be made on disposing of federal projects to private industry, or, if this is not feasible, to the states and local governments.

JOHN JIRGAL, chairman of the group on water, and Wesley W. Horner, chairman of the group on flood control, told the delegates at the St. Louis meeting that government activity in the power field had been defended because of large-scale unemployment, defense needs, power needs of the Atomic Energy Commission, lack of private money for financing projects, and faulty financial structures among private utilities.

Jirgal said that may have been true in the past, but was not true now. He said there is no unemployment problem and has been none for fifteen years; there is no world war requiring emergency defense work, and that private utilities "are contributing to the extensive requirements of the Atomic Energy Commission about as much energy as the federal

agencies themselves are contributing."

A Close Vote Expected on Gas Bill

As the controversial Harris-Hinshaw Bill was being held up for the completion of House Interstate and Foreign Commerce Committee reports, the impression was growing in Washington that this legislation, which would exempt natural gas producers from FPC regulation, was in trouble. The Democratic leadership, supposed to be solidly behind the bill, was having difficulty keeping northern city Democrats in the so-called "consuming areas" in line. When the word went out that the vote would not be regarded as a test of party regularity, the odds in favor of House passage dropped steadily. The outcome was expected to be close.

After the narrow passage by the House Commerce Committee of HR 6645, a watered-down version of the measure originally sought by the producers, Chairman Priest (Democrat, Tennessee) indicated it would be some little time (possibly two weeks) before the committee report would be ready. Once the majority and various minority views were completed, the committee chairman was expected to seek floor clearance for the bill from the House Rules Committee. Meantime, the Senate Commerce Committee, with its hearings completed, was watching the House development closely. If the bill should fail in the House, the Senate will probably postpone action until next year, when another try would doubtless be attempted.

One of the reasons why the bill was having such a difficult time getting past the House was the quarreling which broke out between Representatives favoring different segments of the natural gas industry. When the measure was introduced it had been hoped by the supporters of the bill that pipeline companies would join with producers, and to some extent a shaky alliance did materialize.

But later on, quibbling developed within the committee over the responsibility for gas rate increases. Representatives from gas-producing states said it was something like blaming the farmer for the high price of meats and other foodstuffs at the retail end when he actually gets only a small fraction of the retail price.

These differences flared into the open with the introduction of a resolution by Representative Harris (Democrat, Arkansas), cosponsor of the main bill, seeking authority to make a general investigation of the transmission (pipeline) and distribution costs of gas. This proved to be a tactical mistake, since it opened the door for an immediate alternative resolution by Representative Wolverton (Republican, New Jersey), who said that Harris' proposed investigation was all right as far as it went but it did not go far enough and should also cover producers. There the matter stands as the main bill awaits clearance for floor action.

Representative Harris claims that a 2 per cent raise in the field price of gas has been known to result in a 6 per cent increase to consumers. He suggests that this may be caused (1) by interlocking company relationships of various types, (2) by outmoded equipment which carries over into a higher rate charged the public, and (3) by an unnecessary pyramidal sale and resale of gas before it reaches the consumer. These suggestions are likely to be viewed with hostility, not only by pipeline and distributing interests, but also regulatory authorities—including the FPC—which are responsible for holding transportation and distribution prices in line.

Wire and Wireless Communication

Higher Earnings for Utilities?

OVER a period of years, the American public has come to expect, from regulated as well as competitive business enterprise, a certain high level of performance. It has never ceased to demand better products and services, a higher living standard for management and labor, and an attractive return to stockholders.

Secretary of Commerce Sinclair Weeks recently had occasion to point out the important rôle played by the public service commissions in enabling the regulated industries to do their job, in an address to the Mountain Pacific States Conference of Public Service Commissions in Reno, Nevada.

The Secretary of Commerce took a rather original approach by comparing the need for constant progress and self-searching experimentations in nonregulated, competitive industries with the regulated public utility industries. He noted that in an ordinary competitive business the public expects the trustees of that business to provide more and better products. But what about regulated business—the public utilities? Looking at the record of performance, Weeks found that it was, on the whole, very good—especially when compared with performances in foreign countries.

Secretary Weeks remarked that the regulatory system, as practiced in the United States, is a product of the American reaction to American conditions in the past. The regulatory laws, the regulatory decisions, and the thinking back of them change from time to time. With this preface, he posed a basic question: What changes now need to be made in the regulatory process to improve utility performance? He said:

> The rate of technological advance in research is increasing. It is now so organized and so widely supported in industry that improvements and economies come in greater quantity than heretofore and at an ever accelerating pace. Innovations hasten obsolescence. More risks have to be taken. There must be a faster flow of capital into industry.
>
> In the competitive field the company that moves fast can make extra profits. These extra profits give it money with which to move fast again. For the public benefit it is not even necessary that all these moves work out. But it is necessary that on the average they do work out and that the moves result

finally in cheaper and better products for and service to the public.

This kind of progress is not so easy in the regulated industries, for, unfortunately, we have come to regulate the price they charge by limiting the profit they can make. In general, the statutes provide for reasonable rates and prohibit regulation which tends to confiscate property by giving less than a fair rate of return.

THE Secretary suggested that the question arising at this time and in the light of conditions which will be faced in the future is whether a rate is reasonable if it does not stimulate research to the fullest possible extent, does not recognize obsolescence, and does not encourage the rapid development and use of equipment which can increase efficiency and cut costs.

According to the Secretary of Commerce:

> In the competitive world we should never think of assuming that a company that made a low profit was for that reason the best place to buy.
>
> Our instinct and experience is rather the opposite of that philosophy. Yet in the regulated field we do assume that it is something of proof that the rates to the consumer are right *if* the return to the company is relatively low—very far below the return of a successful company in the competitive field.
>
> In my judgment, it is not only possible but almost surely probable that, in the regulated industries, the rates to the public would be lower and the service better if the return on investment were higher and the stimulation to progress were thereby greater. It seems to me this possibility deserves study and experimentation.
>
> I do not understand that the regulation of rates by limiting profits was in the beginning or is now based on any economic or social theory but rather I think it came about because it was the easiest practical way to regulate. That being true—and as the regulated industries in this country are more advanced here even under regulation than they are in other countries under either government or private operation—the first question that occurs is why should we speculate about any changes.

THERE are several reasons, according to Secretary Weeks. It is incumbent upon trustees to constantly ponder whether or not what they are doing is the best that can be done. It is no more safe to assume that the future will follow the past, the Secretary asserts, than it is to assume the opposite. In spite of the good record of the regulated industries, it is not at all clear that they have stimulated public desire for their services as well as they might have.

The Secretary comes to this conclusion:

> I have no formula for a change in the regulatory concepts. I am not sure that one can or should be devised.
>
> But I do feel sure that it would be useful to speculate about the possibility of stimulating regulated industries to their utmost endeavors. This is particularly important not only because these industries serve the public directly, but also because they are vital servants of pretty much all other industry, and as they progress so does our whole industrial enterprise.
>
> These regulated industries are absolutely vital to the progress of our national economy. They do not provide the fullest possible service to the public if they only meet a demand after it has arisen when other industry helps create the demands which constantly increase our well-being and strength.

Air Force Unveils New Communications Project

THE Air Force is embarking on a $2 billion program to put its air defense communications system in the United States on a semiautomatic basis. The existence of the hitherto secret project—called "Sage" for Semiautomatic Ground Environmental System—was disclosed in hearings on the military budget released by the Senate Appropriations Committee. "Sage" is designed to improve the air defenses of the U. S. by replacing the presently manually operated communications system with a semiautomatic operation. The complex communications network will link all points in the air defense system—from the radar outposts to the control points and back to the fighter units and guided-missile battalions.

A novel feature about the system is the manner in which it will be financed. Instead of buying the communications equipment and lines outright, the Air Force will acquire the equipment through a lease-purchase arrangement with private telephone companies, such as American Telephone and Telegraph Company. Of course, this is not exactly novel to the telephone industry, which has traditionally operated on the basis of selling service rather than equipment. The private telephone companies will install the equipment. The Air Force will then lease it, with the cost to be paid off by lease payments over a 10-year period. It was estimated by Air Force officials that the cost of the annual payments may run as high as $240,000,000.

The authority of the Air Force to enter into such contracts apparently has not been resolved. Air Force officials told the committee that the Defense Department believes there is authority in present law. But the testimony disclosed that the Budget Bureau has directed the Air Force to submit the question of authority to the General Accounting Office for a decision. Senator Chavez (Democrat, New Mexico), chairman of the Military Appropriations Subcommittee, commented during the hearings that the effect of the arrangement was "to place a $2 billion mortgage on the Congress."

THE Air Force was ordered to go ahead with the "Sage" project by a directive from the National Security Council "for the purposes of improving the air defenses of the United States." The testimony indicated, however, that the system will not go into large-scale operation for another three or four years. The present air defense communications system operates largely over leased wires, with the information transmitted manually, either by a teletype machine or by an operator at a telephone.

Exactly how a "semiautomatic" operation will be achieved was not disclosed, except that it involves "complex gear," being designed by the telephone companies. Within the United States, "Sage" will involve a vast complex of communications circuits to link all points in the air defense command. Instead of the present 1,500 circuits, "Sage" will require about 25,000 circuits. As described by Assistant Air Force Secretary Lyle S. Garlock, "Sage" will "feed the information from a radar that picks up an unidentified plane into the control center and back out to the fighter units, the antiaircraft units, or the missile units."

Senator Chavez wants to be sure that the government "does not pay extra dividends to the telephone company." Air Force officials explained that a check would be made by reviewing communications rates authorized by local public utility commissions and the FCC.

Financial News and Comment

By OWEN ELY

Fulbright Committee Report Stresses Institutional Buying Of Stocks

THE Senate Committee on Banking and Currency, headed by Senator Fulbright, recently published its report on the study of the stock market, together with a larger (201 pages) staff report, entitled "Factors Affecting the Stock Market." The staff report, with its numerous charts and tables, appears to be a very thorough compilation of available data and should rank among the more valuable studies of bull and bear markets and business cycles.

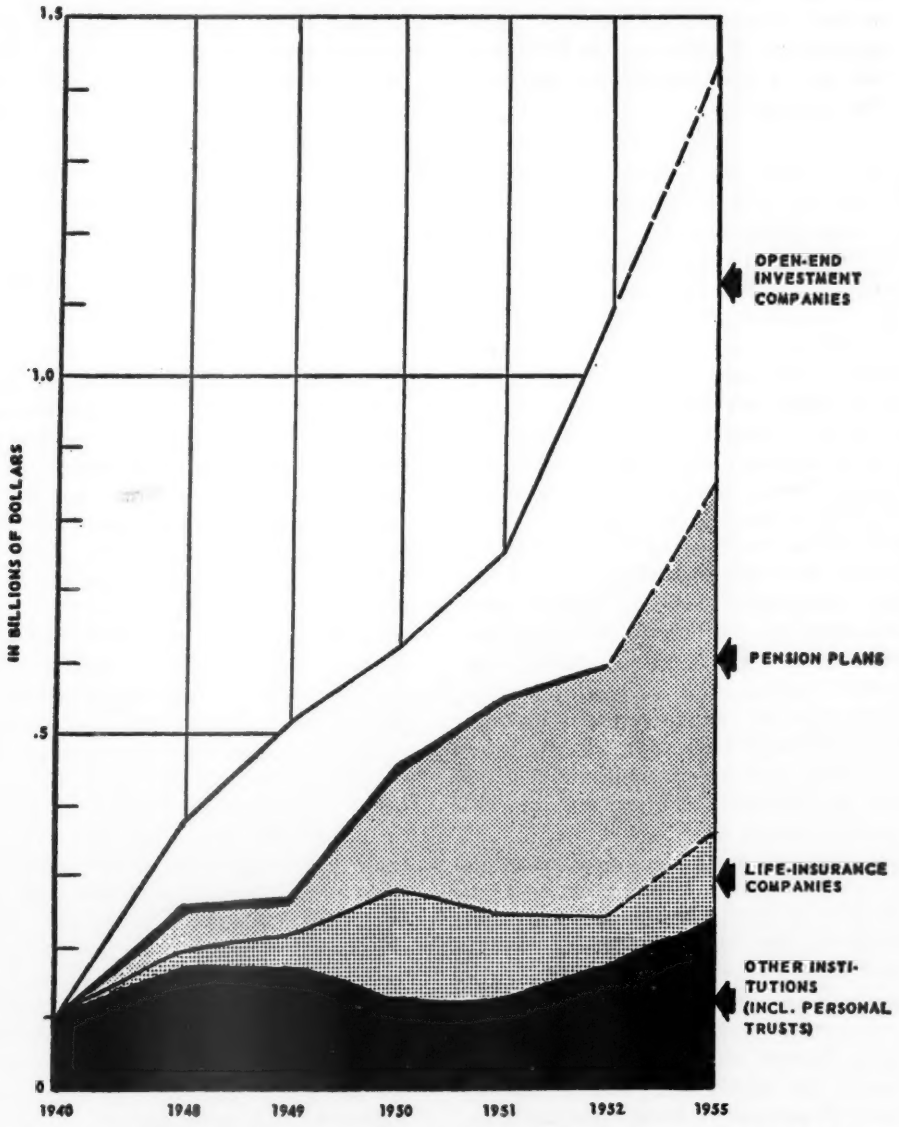
The committee was ostensibly aided in its investigation by the views expressed in some 1,300 replies to questionnaires (of which 5,613 had been sent to economists, brokers and dealers, investment advisers, financial writers, etc.). The principal purpose of the questionnaire was to obtain their views regarding the stock market advance, which had amounted to 50 per cent in the sixteen months between September, 1953, and January, 1955, with 10 per cent in the last three months of that period. The committee also wanted to study the possible dangers in recent market activity and the increasing volume of security loans, obtain any indications of inadequate government regulation of security markets, and study the relationships between stock movements and business fluctuations. Public hearings were held during March 3rd-23rd, with twenty-one witnesses and 1,000 pages of testimony.

Discussing the market advance, the committee report stated:

> Speculative activity becomes evident when businessmen and the public generally become unduly preoccupied with the stock market and stock prices, new highs in stock price averages are front-page news, the tipster increasingly flourishes, flamboyant advertising keyed to the lure of quick profits becomes more widespread, and there is a rash of security offerings of dubious merit. The expansion in the volume of short-term trading is facilitated by an increasing use of bank credit for stock speculation. Rising stock prices and ease of credit stimulate business and bank mergers, and the climate becomes increasingly favorable for the "empire

DEPARTMENT INDEX

ANNUAL NET PURCHASES OF COMMON STOCK BY FINANCIAL ORGANIZATIONS AND INSTITUTIONS



FORTUNE MAGAZINE, March 1953 Irwin Friend, "New Influences in the Stock Market".

Source, "Factors Affecting the Stock Market," Senate Committee Report.

builder" to attempt to acquire financial control of corporations. These symptoms of the rise of speculative activity have been apparent in the recent bull market. They are not nearly so conspicuous as was the case in 1929, but this is no justification for ignoring their existence.

CONCERNING the greater use of credit, the report pointed out that customers' debit balances at the end of March, 1955, amounted to $2.7 billion, the highest since 1931, and an increase of 66 per cent since September, 1953. While the amount of credit was not considered large in relation to the total volume of all credit, the increase was doubtless a substantial factor in the market advance. Moreover, early in February all member banks of the Federal Reserve System had outstanding $7.2 billion loans on securities, of which $2.9 billion were loans to brokers and dealers, $1.3 billion to others, and $3 billion "nonpurpose" loans (collateral loans ostensibly for purposes other than the purchase or carrying of securities). The report recommended that bank supervisory agencies take more positive action to check these "nonpurpose" loans.

Various spot surveys indicated a sharp rise in short-term trading and margin trading, with a moderate decline in the proportion of long-term investment. A survey in December revealed that less than 10 per cent of individual buyers were currently buying stocks for income, while over 90 per cent were motivated by the desire for profits or capital gains.

Chairman Martin of the Federal Reserve System testified that the board's reason for raising margin requirements from 50 per cent to 60 per cent on January 4, 1955, was the increase in short-term trading and use of credit, the number of new brokerage customers (many of them novices), and the fact that the business community is now becoming "preoccupied" with stock price movements. The rate was further raised to 70 per cent on April 22nd, but the committee was critical of the board's action: "The committee questions whether, during a period when speculative excesses multiply, the exercise of the power over margin requirements does not lose effectiveness when increases are applied only by successive small increments." Some witnesses suggested a more flexible or selective system of margin controls, amortization of security loans, etc.

CONSIDERABLE stress was laid on institutional buying during the hearings and it was generally agreed that this has become of much greater importance in recent years. In New York state life insurance companies were first permitted in 1951 to buy common stocks, and in the following year savings banks were also given permission. Winthrop H. Smith, managing partner of Merrill Lynch, Pierce, Fenner & Beane, estimated that pension funds had invested $2 billion last year. (But according to another study, common stock purchases were only $450,000,000.) Corporate trustees and managers of endowment funds were said to be placing an increasing proportion of their investment funds in common stocks. Moreover, it was stressed that most purchases by institutions are "taken out of the market" and held for long-term investment. The committee was greatly interested in the "double standard" in the securities markets. Issuers of securities which are only traded in the over-counter market are exempt from many requirements (such as reporting officers' salaries and bonuses, submitting earnings statements, and complying with insider trading rules, proxy regulations, etc.). Over-

counter securities are not eligible for loans by brokers or dealers, but banks can loan as much as they like, since the margin requirements imposed by Regulation U apply only to loans on listed securities.

The committee also discussed the rampant speculation in penny stocks (largely uranium and Canadian issues), the question of tightening up the regulation of investment advisers and eliminating tipsters, etc. It recommended a study of officer trading, stock options, and proxies.

THE committee concluded that the market during 1953-54 had registered its confidence in improving business conditions but that "when preoccupation with the stock market results in widespread distortion of perspective, the stock market may become a potential threat to the stability of the economy. We cannot rule out the possibility of the recurrence of business fluctuations despite the progress that has been made to cope with the problems of instability. Therefore, the development of speculative trends in the stock market bears close watching."

A minority group of four Senators, headed by Homer E. Capehart, held that the committee had not given full weight

PER CENT OF COMMON STOCK OF LEADING UTILITIES HELD BY INSTITUTIONS, DECEMBER, 1954

American Gas & Electric	14%	Middle South Utilities	24%
American Natural Gas	18	Montana Dakota	1
American Tel. & Tel.	2	Montana Power	16
Atlantic City Electric	8	New England Electric	8
Boston Edison	6	N. Y. State Elec. & Gas	27
Brooklyn Union Gas	23	Niagara Mohawk	15
Central Hudson Gas	4	Northern Natural Gas	20
Central Illinois Light	26	Northern States Power	11
Central Illinois Public Service	10	Ohio Edison	12
Cincinnati Gas & Electric	17	Oklahoma Gas & Elec.	13
Cleveland Electric	16	Oklahoma Natural Gas	9
Columbia Gas	6	Pacific Gas & Elec.	8
Columbus & Southern Ohio	15	Pacific Lighting	3
Commonwealth Edison	7	Peninsular Telephone	9
Consolidated Edison	8	Pennsylvania P. & L.	3
Consolidated Natural Gas	16	Peoples Gas	15
Consumers Power	14	Philadelphia Electric	6
Dayton Power & Light	19	Potomac Electric	6
Delaware Power & Light	19	Public Service of Colo.	23
Detroit Edison	7	Public Ser. E. & G.	11
Duquesne Light	7	Public Ser. of Indiana	20
El Paso Natural Gas	12	Rochester Gas	27
Equitable Gas	8	San Diego Gas & Elec.	2
Florida Power Corp.	20	South Carolina E. & G.	9
Florida Power & Light	16	Southern Calif. Edison	14
General Public Utilities	18	Southern Company	10
General Telephone	4	Southern Natural Gas	9
Gulf States Utilities	21	Southwestern P. S.	4
Hackensack Water	8	Texas Utilities	17
Houston Lighting	16	Toledo Edison	1
Idaho Power	26	Union Electric of Mo.	1
Illinois Power	25	United Gas Corp.	15
Indianapolis P. & L.	17	United Gas Improvement	15
Interstate Power	9	Utah Power & Light	13
Iowa-Illinois Gas & E.	18	Virginia Electric & Power	18
Iowa Power & Light	24	Washington Gas Light	5
Kansas City P. & L.	26	Washington Water Power	5
Kansas Power & Light	18	West Penn Electric	10
Lone Star Gas	7	Western Union	2
Long Island Lighting	6	Wisconsin Electric Power	23
Louisville G. & E.	16	Wisconsin Public Service	7

	Est. Common Stock Holdings 12/31/54		*Net Purchases of Common Stocks in 1954***	
	Billions	*Percentage*	*Millions*	*Percentage*
Life Insurance Companies	$ 1	—	$ 130	6%
Other Insurance Companies	5	2%	140	7
Savings Banks	1	—	140	7
Investment Companies, Open-end	9*	4	380	18
Corporate Pension Funds	3	1	450	21
Personal Trust Funds	33	13	200	9
Nonprofit Institutions	6	3	80	4
Total Institutions	$ 58	23%	$1,520	72%
Foreigners	5	2	120	6
Domestic Individuals	189	75	460	22
Total	$252	100%	$2,100	100%

* Includes $4 billion for closed-end investment companies.
** Net additions to common stock outstanding.

to the accomplishments of the Eisenhower administration as a market factor—the progress made toward achieving a lasting peace, maintaining employment and purchasing power at a high level, stabilizing commodity prices, etc. Some 90 per cent of the questionnaire replies (in what amounted to a "write-in vote") attributed current stock market levels, in one way or another, to confidence in the Eisenhower administration, the minority held.

Among the twenty-one witnesses only one economist was included, and the minority group stated: "We have never understood why Professor John K. Galbraith was singled out as the only economist to appear before the committee, particularly since he has long been a controversial figure and had just finished writing a book on the 1929 crash, which he was about to publish." The minority group concurred, however, in recommending a further study of over-counter markets, "penny stocks," and foreign sales of securities to U. S. citizens, with the objective of developing new legislation if needed.

THE staff report includes a large amount of valuable research data on stock price movements, general business fluctuations, borrowing on securities, the impact of federal tax policies, individual and institutional investments in stocks, the functioning and regulation of the stock exchanges, and the problems of the over-counter market. Chapter 5, "Individual and Institutional Investment in Stocks,"

	46 Colleges	*2 Large Foundations**	*1,023 Insurance Companies*	*200 Investment Trusts*
Consolidated Edison	25	17	359	630
Commonwealth Edison	62	25	806	144
Detroit Edison	82	—	516	133
Pacific Gas & Elec.	33	13	509	413
Public Service Elec. & Gas	11	—	324	739
Philadelphia Electric	52	—	519	80
Boston Edison	—	—	146	12
Cleveland Electric	44	9	399	87
Cincinnati Gas & Elec.	96	—	871	184
Middle South Utilities	206	33	613	889

* Rockefeller and Carnegie.

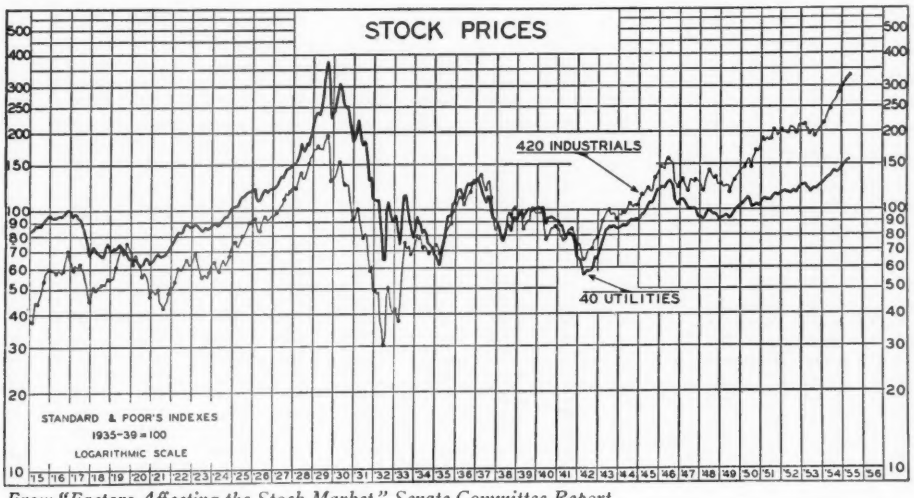
is of special interest. At the end of 1954, the staff estimated, all common stocks were valued at $252 billion (excluding about $50 billion representing intercorporate holdings), and all preferred issues at $16 billion; of the total, over $150 billion or 56 per cent were traded on the 19 security exchanges of the country, with the remainder in the over-counter market. It was estimated that individuals held 75 per cent of the common stocks, foreigners 2 per cent, and institutions and trusts 23 per cent.

It has sometimes been stated that the present bull market is largely an "institutional affair," because trading activity has been largely concentrated in the higher-priced blue chip issues, while the low-priced stocks in which the public is usually heavily interested have not kept pace on the average. This seems to be borne out by the figures contained in the staff report in Table 1 on page 89, and Table 4 on page 95, which are here combined in the table at the top of page 42. These figures appear to show that while institutions at the end of 1954 held less than one-quarter of all common stocks, during 1954 they purchased nearly three-quarters of the net additions to the stock list.

HOWEVER, the data in the table do not, of course, reflect the amount of short-term trading in that year, in which the individuals participated to a much greater extent than would be indicated by their net purchases. Table 8 (page 100) in the staff report gives a sampling of trading activity on the New York Stock Exchange in the period December 8-15, 1954, which credited individuals with 62 per cent of the share volume, members and dealers with 24 per cent, and institutions with only 14 per cent.

FORTNIGHTLY readers will be interested in the data on institutional holdings of utility stocks. Based on statistics for 18 life insurance companies (constituting about 75 per cent of the industry) the aggregate portfolio of common stocks at the end of 1953 was made up as follows: 63 per cent industrial, bank, insurance, and miscellaneous stocks; 31 per cent utility stocks; and 6 per cent rails.

The appendix on pages 184-200 of the report presents a compilation of certain



From "Factors Affecting the Stock Market," Senate Committee Report.
(Prices have been extended to June 15, 1955.)

institutional holdings prepared by Hemphill, Noyes & Co. in September, 1954, from which we have selected figures for some of the larger utility companies (table at the bottom of page 42).

The table presented on pages 167-181 of the report, "Concentrated holdings of common stocks of 1,043 corporations listed on the New York Stock Exchange, December, 1954," is of special interest. This shows total shares outstanding as compared with shares held by (1) institutions, (2) officers, directors, associates, etc., and (3) other large holdings. The table on page 41 shows the percentage of institutional holdings (only) for some of the larger utility companies.

The Utility Analysts' Weekly Forums

THE New York Society of Security Analysts has designated Wednesday as the day for its utility luncheon forums. Each meeting includes a talk, usually by a utility company president, followed by a discussion or question period, which affords the analyst a better understanding of the utility company and the policy of its management than can usually be obtained from published sources. At the same time the forum affords the management of a utility an opportunity to become better acquainted with the thinking and needs of analysts and representatives of the New York financial institutions. Printed copies of talks are often sent to the 2,100 members of the NYSSA and frequently to the 4,600 members of The National Federation of Financial Analysts Societies.

The utility program committee invites speakers from a representative group of both large and small companies in the various branches of the utility industry.

Members of the utility program committee for 1955-56 are: C. E. Trefthen, chairman, Goldman, Sachs & Co.; David Cowan, Shearson, Hammill & Co.; Marjorie H. Cruthers, Irving Trust Company; Maurice E. Dixon, Merrill Lynch, Pierce, Fenner & Beane; Frank P. Glass, Chemical Corn Exchange Bank; David W. C. Rothrock, Lionel D. Edie & Co., Inc.; and Alvord D. F. Stearns, The Hanover Bank.

DATA ON ELECTRIC UTILITY STOCKS

1954 Rev. (Mill.)			*6/15/55 Price About*	*Div. Rate*	*Current Yield*	*Share Earnings* Cur. Period*	*% Increase*	*12 Mos. Ended*	*Price-Earns. Ratio*	*Dividend Pay-out*	*Common Stock Equity*
$230	S	Amer. Gas & Elec.	45	$1.80	4.0%	$2.69**	11%	April	16.7	67%	33%
35	O	Arizona Pub. Serv.	27	1.00	3.7	1.52	15	April	17.8	66	28
9	O	Arkansas Mo. Power	25	1.24a	5.0	1.86	24	Mar.	13.4	67	30
27	S	Atlantic City Elec.	44	1.60b	3.6	2.19	17	April	20.1	73	30
107	S	Baltimore Gas & Elec.	33	1.60	4.8	1.98	29	Mar.	16.7	81	37
5	O	Bangor Hydro-Elec.	36	1.80	5.0	2.30	8	Mar.	15.7	78	33
4	O	Black Hills P. & L.	26	1.28	4.9	2.15	4	April	12.1	60	26
86	S	Boston Edison	58	2.80	4.8	3.12	5	Dec.	18.6	90	53
17	A	Calif. Elec. Power	14	.60	4.3	.76	D6	Mar.	21.1	79	34
17	O	Calif. Oregon Power	32	1.60	5.0	1.86	32	Dec.	17.2	86	36
7	O	Calif.-Pacific Util.	29	1.40	4.8	2.20**	5	April	13.2	64	30
54	S	Carolina P. & L.	24	1.10	4.6	1.55	13	April	15.5	71	32
23	S	Cent. Hudson G. & E.	17	.76	4.5	1.02	26	Mar.	16.7	75	33
16	O	Cent. Ill. E. & G.	39	1.80	4.6	2.72	36	Mar.	14.3	59	32
30	S	Cent. Ill. Light	54	2.20	4.1	3.16	10	April	17.1	70	40
46	S	Cent. Ill. P. S.	27	1.40	5.2	2.13	44	Mar.	12.7	66	33
10	O	Cent. Louisiana Elec.	29	1.20	4.1	1.62	17	Mar.	17.9	74	30
30	O	Cent. Maine Power	25	1.40	5.6	2.03	21	April	12.3	69	30
105	S	Cent. & South West	35	1.32	3.8	1.90	15	Mar.	18.4	69	33
10	O	Cent. Vt. P. S.	18	.92	5.1	1.32	42	April	13.6	70	30
95	S	Cincinnati G. & E.	27	1.20	4.4	1.78	13	Mar.	15.2	67	37

1954 Rev. (Mill.)		(Continued)	6/15/55 Price About	Div. Rate	Current Yield	Share Earnings* Cur. Period	% Increase	12 Mos. Ended	Price-Earns. Ratio	Dividend Pay-out	Common Stock Equity
6	O	Citizens Utilities	16	.48h	6.0h	1.07	5	Mar.	15.0	45	38
91	S	Cleveland El. Illum.	36	1.30	3.6	1.99	D3	Mar.	18.1	65	44
3	O	Colo. Cent. Pwr.	29	1.20	4.1	1.63	15	Mar.	17.8	74	39
35	S	Columbus & S. O. E.	31	1.60	5.2	1.97	3	Mar.	15.7	81	33
310	S	Commonwealth Edison	44	2.00	4.5	2.78	32	Mar.	15.8	72	49
10	A	Community Pub. Service	24	1.00#	4.2	1.76	13	Mar.	13.6	57	49
2	O	Concord Electric	40	2.40	6.0	2.64	6	Dec.	15.2	91	63
60	O	Connecticut L. & P.	20	.98	4.9	1.15	8	April	17.4	85	38
19	O	Connecticut Power	45	2.25	5.0	2.56	10	Mar.	17.6	88	41
474	S	Consol. Edison	49	2.40	4.9	2.96	2	Mar.	16.6	81	43
170	S	Consumers Power	48	2.20	4.6	3.23	8	April	14.9	68	42
61	S	Dayton P. & L.	43	2.00	4.7	3.01	1	Mar.	14.3	66	36
31	S	Delaware P. & L.	35	1.50	4.3	2.17	14	Mar.	16.1	69	35
196	S	Detroit Edison	36	1.60	4.4	2.21	15	April	16.3	72	45
113	A	Duke Power	54	2.00	3.7	3.21	1	Mar.	16.8	62	53
81	S	Duquesne Light	35	1.80	5.1	2.11	1	Mar.	16.6	85	32
27	O	Eastern Util. Assoc.	35	2.00	5.7	2.36	8	April	14.8	85	33
2	O	Edison Sault Elec.	14	.60	4.3	1.04	27	Dec.	13.5	48	49
10	O	El Paso Elec.	40	1.60	4.0	2.41	16	April	16.6	66	37
10	S	Empire Dist. Elec.	26	1.40	5.4	1.88	D11	Mar.	13.8	74	32
4	O	Fitchburg G. & E.	54	3.00	5.6	3.26	16	Dec.	16.6	92	53
38	S	Florida Pwr. Corp.	43	1.60	3.7	2.25	11	Mar.	19.1	71	30
79	S	Florida P. & L.	37	1.00	2.7	1.90	28	Mar.	19.5	53	35
163	S	General Pub. Util.	36	1.70	4.7	2.51	11	Mar.	14.3	68	39
6	O	Green Mt. Power	32	1.80	5.6	2.30	30	Mar.	13.9	78	39
47	S	Gulf States Util.	33	1.40	4.2	1.93	2	April	17.1	73	30
20	A	Hartford E. L.	59	2.75	4.7	3.70	10	Mar.	15.9	74	47
5	O	Haverhill Elec.	44	2.15†	4.9	1.95	D35	Dec.	22.6	110	100
58	S	Houston L. & P.	41	1.20	2.9	2.19	26	Mar.	18.7	55	40
7	O	Housatonic P. S.	26	1.40	5.4	1.58	20	Dec.	16.5	89	46
23	S	Idaho Power	28	1.10	3.9	1.83	9	Mar.	15.3	60	35
70	S	Illinois Power	52	2.20	4.2	3.20	24	April	16.3	69	35
37	S	Indianapolis P. & L.	26	1.20	4.6	1.70	6	Mar.	15.3	65	35
18	S	Interstate Power	14	.70	5.0	1.00	8	Mar.	14.0	70	30
27	O	Iowa Elec. L. & P.	27	1.25	4.6	1.94	19	April	13.9	64	30
31	S	Iowa-Ill. G. & E.	35	1.80	5.1	2.33	10	April	15.0	77	39
31	S	Iowa Power & Lt.	27	1.40	5.2	1.89	D1	Mar.	14.3	74	30
27	O	Iowa Pub. Service	16	.80	5.0	1.10	9	April	14.5	73	29
12	O	Iowa Southern Util.	23	1.20	5.2	1.62	7	April	14.2	74	38
51	S	Kansas City P. & L.	40	1.80	4.5	2.31	8	April	17.3	78	34
25	S	Kansas Gas & Elec.	29	1.20	4.1	1.99	14	April	14.6	60	31
36	S	Kansas Pr. & Lt.	23	1.20	5.2	1.56	13	Mar.	14.7	77	26
35	O	Kentucky Util.	27	1.20	4.4	2.30	25	Mar.	11.7	52	33
6	O	Lake Superior D. P.	23	1.10	4.8	1.44	1	Mar.	16.0	76	37
5	O	Lawrence Elec.	30	1.60	5.3	1.40	D25	Dec.	21.4	77	63
77	S	Long Island Ltg.	22	1.00	4.5	1.26**	D2	Mar.	17.4	79	32
41	S	Louisville G. & E.	50	2.00	4.0	3.53	4	Mar.	14.2	57	34
7	O	Lowell Elec. Lt.	60	3.30†	5.5	3.04	D19	Dec.	19.7	109	65
8	O	Lynn G. & E.	30	1.60	5.3	2.01	D7	Dec.	14.9	80	75
7	O	Madison G. & E.	43	1.60	3.7	3.20	2	Dec.	13.4	50	53
3	A	Maine Public Service	20	1.07	5.4	1.47	31	April	13.6	73	35
4	O	Michigan G. & E.	42	1.35h	6.2h	3.42	17	Mar.	12.3	39	31
144	S	Middle South Util.	31	1.50	4.8	2.18	12	April	14.2	69	35
24	S	Minnesota P. & L.	25	1.20	4.8	1.75	D9	April	14.3	69	35
2	O	Miss. Valley P. S.	28	1.40g	5.0	2.44	13	May	11.5	57	30
10	A	Missouri P. S.	14	.60	4.3	.84	D5	April	16.7	71	28
5	O	Missouri Util.	27	1.36	5.0	1.89	19	Mar.	14.3	72	35
31	S	Montana Power	39	1.60	4.1	2.67	—	April	14.6	60	36
122	S	New England Elec.	17	.90	5.3	1.23**	—	Mar.	13.8	73	34
38	O	New England G. & E.	18	1.00	5.6	1.32**	D2	April	13.6	76	37
43	O	New Orleans P. S.	45	2.25	5.0	2.64	4	April	17.0	85	39
2	O	Newport Electric	42	2.00	4.8	2.59	D5	April	16.2	77	34
73	S	N. Y. State Elec. & Gas	40	2.00	5.0	2.64	D1	Mar.	15.2	76	35
210	S	Niagara Mohawk Pwr.	32	1.60	5.0	2.14	4	Mar.	15.0	75	34
68	O	Northern Ind. P. S.	35	1.60	4.6	2.58	19	April	13.6	62	34
118	S	Northern States Pr.	17	.80	4.7	1.11	9	Mar.	15.3	72	33

1954 Rev. (Mill.)		(Continued)	6/15/55 Price About	Div. Rate	Current Yield	Share Earnings* Cur. Period	% Increase	12 Mos. Ended	Price-Earns. Ratio	Dividend Pay-out	Common Stock Equity
9	O	Northwestern P. S.	16	.90	5.6	1.31	7	Mar.	12.2	69	27
110	S	Ohio Edison	47	2.20	4.7	3.20	10	April	14.7	69	41
40	S	Oklahoma G. & E.	36	1.60	4.4	2.13	33	April	16.9	75	30
14	O	Otter Tail Power	30	1.60	5.3	2.01	3	April	14.9	80	31
386	S	Pacific G. & E.	49	2.20	4.5	3.10	15	Mar.	15.8	71	39
40	O	Pacific P. & L.	27	1.30	4.8	1.57	D3	Mar.	17.2	83	28
109	S	Penn Power & Lt.	47	2.40	5.1	2.95	7	April	15.9	81	29
196	S	Philadelphia Elec.	40	1.80	4.5	2.29	4	Mar.	17.5	79	36
29	O	Portland Gen. Elec.	23	1.00	4.3	1.56	20	April	14.7	64	42
52	S	Potomac Elec. Pwr.	22	1.00	4.5	1.18	2	Mar.	18.6	85	36
63	S	Pub. Serv. of Colo.	42	1.80	4.3	2.52	8	Mar.	16.7	71	34
250	S	Pub. Serv. El. & Gas	31	1.60	5.2	2.12**	14	Mar.	14.6	75	31
62	S	Public Serv. of Ind.	42	2.00	4.8	2.44	4	April	17.2	82	34
23	O	Public Serv. of N. H.	17	.90	5.3	1.39	58	April	12.2	65	33
10	O	Public Serv. of N. M.	15	.68	4.5	.96	55	Mar.	15.6	71	31
21	S	Puget Sound P. & L.	37	1.72	4.6	2.11	12	Mar.	17.5	82	58
49	S	Rochester G. & E.	48	2.24	4.7	3.25	D2	Mar.	14.8	69	34
14	O	Rockland L. & P.	19	.60	3.2	.83	36	Dec.	22.9	72	29
7	S	St. Joseph L. & P.	25	1.32	5.3	1.77	2	Mar.	14.1	75	43
39	S	San Diego G. & E.	19	.80	4.2	1.06	6	April	17.9	75	44
8	O	Sierra Pacific Pr.	41	2.00	4.9	2.76	24	April	14.9	72	28
154	S	So. Calif. Edison	50	2.40	4.8	3.05	29	Mar.	16.4	79	37
34	S	So. Carolina E. & G.	18	.90	5.0	1.38**	13	Mar.	13.0	65	28
6	O	Southern Colo. Pr.	16	.70	4.4	1.21	D1	Feb.	13.2	58	41
194	S	Southern Company	20	.90	4.5	1.31	4	April	15.3	69	29
14	S	So. Indiana G. & E.	32	1.50	4.7	2.47	22	April	13.0	61	34
4	O	So. Nevada Power	20	.80	4.0	1.48	45	Dec.	13.5	54	64
1	O	Southern Utah Pr.	16	1.00	6.3	.93	7	April	17.2	108	39
3	O	Southwestern E. S.	21	1.00	4.8	1.53	10	April	13.7	65	31
33	S	Southwestern P. S.	27	1.32	4.9	1.56	10	Mar.	17.3	85	30
20	A	Tampa Elec.	29	1.00	3.4	1.49	22	April	19.5	67	36
117	S	Texas Utilities	77	2.32	3.0	3.92	18	April	19.6	59	37
35	S	Toledo Edison	15	.70	4.7	.97	14	Mar.	15.5	72	29
11	O	Tucson G. E. L. & P.	31	1.04	3.4	1.76	25	Mar.	17.6	59	40
114	S	Union Elec. of Mo.	30	1.40	4.7	1.69	19	Mar.	17.8	83	36
28	O	United Illuminating	54	2.55†	4.7	3.13	8	Dec.	17.3	81	51
4	O	Upper Peninsula Pr.	28	1.40	5.0	2.38	60	Dec.	11.8	59	31
32	S	Utah Power & Lt.	47	2.20	4.7	3.07	27	April	15.3	72	41
96	S	Virginia E. & P.	37	1.60	4.3	2.37	35	April	15.6	68	32
23	S	Washington Water Pr.	39	1.70	4.4	1.97	8	April	19.8	86	33
116	S	West Penn Elec.	27	1.32	4.9	1.93	9	April	14.0	68	27
64	O	West Penn Power	48	2.40	5.0	3.05	13	Mar.	15.7	79	33
10	O	Western Lt. & Tel.	32	1.60	5.0	2.77	18	April	11.6	58	27
22	O	Western Mass. Cos.	43	2.20	5.1	2.98	8	April	14.4	74	51
88	S	Wisconsin Elec. Pr. (Cons.)	34	1.50	4.4	2.37	14	Mar.	14.3	63	40
35	O	Wisconsin P. & L.	26	1.28	4.9	1.76	—	Mar.	14.8	73	34
31	S	Wisconsin Pub. Ser.	23	1.10	4.8	1.57	13	Mar.	14.6	70	34
		Averages			4.7%				15.7	72%	
		Foreign Companies									
$186	S	American & Foreign Pr.	14	$ .75(e)	5.4%	$1.90	D25%	Dec.	7.4	39%	48%
137	A	Brazilian Trac. L. & P.	7⅞	—	—	1.26	D6	Dec.	6.0	—	70
56	A	British Columbia Pr.	33	1.00	3.0	1.62	16	Dec.	20.4	62	28
16	A	Gatineau Power	32	1.20	3.8	1.99	12	Dec.	16.1	60	30
10	A	Quebec Power	32	1.20	3.8	1.56	20	Dec.	20.5	77	44
45	A	Shawinigan Wtr. & Pr.	65	1.45	2.2	2.84	25	Dec.	22.9	51	35

B—Boston Exchange. A—American Stock Exchange. O—Over-counter or out-of-town exchange. S—New York Stock Exchange. D—Decrease. *If additional common shares have been recently offered, earnings are adjusted to give effect to the offering. Percentage change is in the net income available for common stock. **Based on average number of shares. a—Also 8 per cent stock dividend. b—Also 5 per cent stock dividend. c—Also 3/10 share of Northern Illinois Gas for each share of Commonwealth Edison. e—Includes 15 cents extra. g—Also 10 per cent stock dividend January 31, 1955. h—Also regular annual 3 per cent stock dividend, which is included in the yield. †Estimated. #—Also occasional stock dividends.

What Others Think

Atomic Energy for Florida?

REPRESENTATIVES of Florida Power & Light Company, Florida Power Corporation, Gulf Power Company, the Tampa Electric Company, and several Florida electric co-operatives attended the first atomic energy conference held by the college of engineering, University of Florida, at Gainesville on May 27th, the day that the state's governor, LeRoy Collins, signed a bill appropriating $500,000 for purchase of a research atomic reactor for the university. Electric power men comprised the largest single group of more than one hundred who attended the conference.

Florida private power companies are closely studying the possibilities of using nuclear energy for fuel instead of fuel oil. Florida, because of its total reliance on fuel oil, is one of the high-cost fuel areas of the country, the others being New England, upper Michigan, the upper Missouri valley, and a section in and around Nevada.

Eight electric co-operatives attended the conference. They are: Seminole Electric Co-operative, Inc., Madison; Central Florida Electric Company, Chiefland; Suwannee Valley Electric Corporation, Live Oak; Tri-County Electric Co-operative, Ebb; Withlacoochee River Power Company, Dade City; Sumter Electric Co-operative, Sumterville; Talquin Electric Co-operative, Inc., Quincy; and the Lee County Electric Co-operative, Fort Myers.

Their interest was partly stimulated by the fact that the Seminole Electric Co-operative is the first group of its size, according to Parks E. Baker of that company, to discuss with the Atomic Energy Commission the possibility of acquiring a power reactor. Seminole has signed an AEC agreement under the Atomic Energy Act of 1954 and is understood to be negotiating now for the purchase of a reactor. Mr. Baker predicted that atomic energy for electric plants will have its first big development in nonhydro areas and that it will come much sooner than was at first thought possible.

MEANWHILE, Florida Power & Light has already arranged to receive data from the AEC in preparation for possible adoption of atomic energy. It was freely predicted at the University of Florida conference that Florida may be one of the first areas in the country to adopt small reactors on an experimental basis. These could be completed much sooner than the large plants which are being built by Consolidated Edison and others, which will be in operation about 1960.

"Since World War II informed scien-

tists have predicted that the first widespread application of atomic energy would be in the generation of electrical power," said Joseph H. Black, research professor at the University of Florida, who received an award for his work with the Manhattan District during the war. He reviewed what has already been started by four utility groups, which propose to invest a total of $150,000,000 to produce 455,000 kilowatts with supporting funds from the government, and the $55,000,000 Consolidated Edison Company of New York's privately financed project. No similar projects for power development have been advanced in Florida, he said, but he added that the Seminole co-op group "has demonstrated its foresight by acquiring a study contract with the Atomic Energy Commission." He said that private utilities in the state are independently studying future possibilities.

CALLING specific attention to such possibilities in Florida, Professor Black said that this state's consumption of electricity in 1954 was 10 billion kilowatt-hours and installed generating capacity was 1,743,000 kilowatts, up respectively 15 per cent and 20 per cent from the previous year. The state's power generating industry has an investment of $600,000,000 and an annual gross revenue of about $150,000,000.

"At present in Florida," said Professor Black, "electric power is produced by means of a single fuel, that being oil. In Gainesville this commodity for power purposes commands a price of 40 cents per million BTU of heat content, and with freight escalation added. This cost is close to the highest level for heat energy in the country. Natural gas may lower the cost from 40 to 30 or 33 cents if and when it becomes available. . . . The increase in [power] consumption per capita has been very impressive. In 1950, private, public, and industrial producers made available 2,020 kilowatt-hours for each person in the state while the average person in the United States was using 2,750 kilowatt-hours. These figures have now risen to 2,830 and 3,380, respectively . . . the incremental increase in Florida is four times that of the nation.

"We should recognize, in discussing the demands for power under Florida conditions, that relatively small blocks are required. At present I believe the largest-sized unit in the state is one of 80,000-kilowatt capacity with the prospect of a 135,000-kilowatt unit to be started in the near future. At the other end of the scale we have a typical co-op load (using largely purchased power) with an average demand for 2,500 kilowatts. This plant at 50 per cent load factor would require a 5,000-kilowatt supply.

"We know that the generation of power from a nuclear reactor even in relatively small blocks is feasible. Three different types have accomplished the task. A homogenous reactor and an experimental breeder have produced quantities sufficient to light office buildings. . . . What will be the cost of constructing a commercial plant to suit Florida conditions? Detailed studies indicate investment costs of $230 per installed kilowatt of capacity and possibly 7 mills per kilowatt-hour at the bus bar even for the larger-sized units of 300 milliwatts or more. Certainly smaller plants may be expected to exceed these figures at the outset. Efforts to work out maximum economic possibilities have somewhat overshadowed the possibilities of the smaller reactors. It would seem to make good economic sense, however, to attack the development problem with the smaller-sized units first, taking smaller-dollar risk, and then to grow in size as technology and economy are dem-

onstrated. The economy factor should be solved more easily here in Florida because of the present higher cost of fuels.

"Our main objective should be to move forward actively to lay plans to build one or more units outside the one proposed for the university, that will gain us experience not only in the technology of atomic energy but in the economics of operation."

—C. E. WRIGHT,
Jacksonville, Florida.

Liberalized Tax Depreciation

THE so-called liberalized depreciation features of the new Internal Revenue Code of 1954 have been hailed in some quarters as an improvement. Some say that, under the code, the taxpayer is to be treated realistically: The Internal Revenue Service will no longer be able to squeeze depreciation allowances far below obviously reasonable claims. C. N. Ostergren, of American Telephone and Telegraph Company of New York, does not recommend either adoption or nonadoption of liberalized depreciation by utilities. But, in a recent speech, "Some Observations on Liberalized Tax Depreciation," presented at the National Conference of Electric and Gas Utility Accountants in Chicago, Mr. Ostergren examined both advantages and disadvantages of the depreciation provisions, from the standpoint of utility companies.

There are three main claims made for liberalized depreciation: (1) that it will lead to a more realistic treatment of depreciation for income tax purposes; (2) that it will provide capital for plant construction; and (3) that it will reduce taxes, and thereby increase earnings. The speaker suggested that while companies outside the utility field will undoubtedly enjoy some or all of these gains, utility companies have special problems that may prevent them from obtaining such advantages.

Said Mr. Ostergren:

> Some nonutility companies, particularly since the war, have been unable to obtain the same depreciation deductions for tax purposes as those used for book purposes. Other such companies have used the same depreciation rates for book purposes that they were allowed for tax purposes, even though the resulting depreciation accruals may have been low for both purposes. Nevertheless, it has long been considered sound practice by much of industry to write off machinery and other depreciable assets rapidly, particularly in times when earnings are good. This, for much industrial equipment at least, is considered to be realistic depreciation treatment....
>
> In the case of many utility companies the situation may well be the reverse. Very likely many of them, at least at times during the past, have used higher depreciation for tax purposes than for book purposes. In recent years these amounts have tended to come together and it may be that most of utility industry is now using the same depreciation rates for tax as for book purposes.
>
> Unless higher depreciation rates for both purposes would be appropriate... the use of liberalized depreciation within the utility field would hardly be characterized as a realistic treatment.
>
> At this point, however, it is well to emphasize that there is no indication in the tax law or in the reports of the congressional committees, which wrote the

law, that it was intended for some industries but not for others. It is quite clear that any company that wishes to, may take full advantage of the liberalized depreciation provisions. . . .

WILL liberalized depreciation provide utilities with capital for plant construction? Here again Mr. Ostergren finds a difference between regulated and nonregulated industry. A nonutility company may be able to increase its earnings through tax savings, and it can plow these increased earnings back into the business. But in a regulated utility company the matter may not be so simple.

The speaker continued with the following statement:

. . . Among regulatory commission people there may be differences of opinion as to what should be done with any tax reductions that become possible under the liberalized depreciation provisions. Some . . . may feel that . . . such tax reductions should be retained by a company for use in the expansion or modification of its facilities . . . Other(s) . . . may feel that as long as the utility is permitted to earn a fair rate of return on its useful property the company will have no difficulty in raising whatever capital it needs for construction through the regular capital markets. These commission people, therefore, may consider that any tax reduction merely reduces the cost of operation and thereby decreases the revenue requirements. In other words, those who hold this view feel that in the utility industry, any tax reduction should immediately be passed on to consumers.

THE question of whether the new law reduces taxes has been widely debated. Mr. Ostergren thinks that, in many situations, tax reductions are illusory. He says:

. . . If a company has not been able to use as high depreciation rates for tax purposes as it has used for book purposes, then that company has, in effect, prepaid taxes. If it can now increase its tax depreciation it will, in effect, get back these prepaid taxes. This will be true until such time as its accumulated tax depreciation reserve catches up with its book depreciation reserve.

Again, if a company now has a tax depreciation reserve which is equal to, or greater than, the book depreciation reserve, and if this company adopts and uses from now on higher depreciation rates for tax purposes than for book purposes, it is not really saving taxes. It is deferring taxes.

Since not more than the cost of property can be recovered through tax depreciation, it is evident that the use of high depreciation rates for tax purposes now can only mean, either that low depreciation rates have been used in the past, or that they will be used some time in the future. In either case no tax saving (assuming constant tax rates) is possible; it is only a question of timing.

There are some points on the other side of this question, however. First, so long as a company continues to grow rapidly, the tax deferment continues. In other words, it is only when construction falls off substantially that the tax collector would catch up with such a company. Second, suppose that corporation tax rates were greatly reduced in the not too distant future. If this were to happen, instead of this being a tax deferment, it might turn out to be a real tax saving . . . it used to be argued that no depreciation expense occurred until plant was retired and, therefore,

practically no depreciation reserve need be set up. . . . it was argued that no deduction needed to be made from earnings until retirement actually occurred. It would seem that only by using this kind of reasoning can it be claimed that the use of higher depreciation rates for tax purposes (assuming constant tax rates) than for book purposes would automatically produce a true tax saving.

In other comment, Mr. Ostergren stated that utilities should weigh with care liberalized depreciation problems as they may appear in the field of the rate case, before one of the regulatory commissions. If a company adopts liberalized depreciation for tax purposes, it may feel that it is essential to treat the difference between actual and normalized taxes as a deferred liability, which must be accrued currently in the accounts before coming to net earnings. The commission may follow the same procedure for rate purposes, but if the commission at any time feels that the difference between actual and normalized taxes is a tax saving, and not a deferment, the company's rates may be reduced, and it will then find itself in the untenable position of accruing currently in the accounts for a deferred liability, even though the service rates do not provide the dollars for it.

The speaker continued:

If a commission recognizes that this is a tax deferment and permits the company to earn enough money to keep up a deferred tax reserve, the company's new capital requirements would be reduced. If in addition the commission did not deduct this tax reserve when arriving at a rate base and did not lower the rate of return, there would also be an increment in earnings.

There is, of course, this to be remembered: Despite the stand the commission takes now, no commission can be indefinitely bound. In the event that a company is now allowed to build up a deferred tax reserve and if it grows to substantial proportions, this reserve could become a problem. The pressures under which the commissions operate, particularly during hard times, might well lead in some cases to the requirement that the reserve be drawn down in order to improve the reported earnings.

Public Transit and the Downtown District

There are those who say that centralized downtown business districts are on their way out, that the enterprises of these areas will and should scatter, hither and yon, into the vastnesses of suburban landscape. But Charles G. Nichols, president of the G. M. McKelvey Company of Youngstown, Ohio, is not one of these. He entitles a recent speech "Reviving the Central Business District," and bases his remarks on the premise that the centralized business section in most cities is still growing, and that it will continue to do so. Public transportation, as one factor in determining central business district conditions, comes in for some criticism. He says:

Speakers, periodicals, and study groups have been devoting a great deal of time and space to probing downtown problems. Viewed with alarm is the development of suburban professional zones. Alarm is expressed over the scarcity of parking space available downtown to compete with the space which attracts retail shoppers to suburban shopping centers. These alarms

are being voiced because a community's downtown represents a capital investment important to every property owner and to every taxpayer in that city. . . .

Of course, every move to solve particular phases of downtown problems results in a conflict of interests. A proposed "solution" for traffic snarls gets opposition because some property owners fear the limitations imposed by a one-way street. . . . parking "solutions" and "suggestions" draw opposition or support on the basis of the amount of benefit a specific location will provide certain businesses.

. . . [Such] "conflict of interests can only be overcome by an over-all approach to the problem that keeps each element in balance and related to the other elements; namely, transit, traffic, parking, pedestrian movement, and improved street appearance."

ACCORDING to Mr. Nichols, 25 to 40 per cent of the working population of an average-sized city converges on downtown buildings on a typical working day. The real estate involved produces between 30 to 45 per cent of the total real property taxes, a vital part of any city's financial structure. The speaker contends that rejuvenation of the central business district will come about chiefly through modernization of it. Blighted areas will be replaced with modern apartment houses and buildings, which, in turn, will increase the community's tax revenue. But Mr. Nichols feels this leaves other equally important problems unresolved. He discusses parking, "jaywalkers' " traffic regulation, and the public transportation system in light of their effects on congested areas.

Of crowded parking conditions, he says:

This is the major headache . . . it should be pointed out that in large cities like Boston only 22 per cent of the suburban residents drive their cars into the downtown area to shop. . . .

On the other hand, a recent survey in Columbus, Ohio, showed 55 per cent of the shoppers from the suburban area drive their cars into the center of the city when they go shopping. This would lead one to the belief that perimeter parking could be a solution in Boston, but not in Columbus. Any solution to the parking problem must be dependent upon certain other factors; such as: traffic flow; kind of traffic that comes into the downtown area; habits of the pedestrians using the downtown streets; the use or lack of use of one-way streets; and the directional control of traffic flow as decided upon by the department in charge of traffic regulation.

. . . [A] modern problem that must be contended with is the fact that the average woman has become a slave to the convenience of the automobile. She wishes to step into her car at her own door and drive just as close as possible to the store of her choice. This is why so many of these perimeter parking plazas on the edge of cities have not produced the desired result. . . .

To increase parking space would be relatively simple if the downtown worker, who is the all-day parker, was required to park his car in perimeter parking lots. This would free downtown parking areas for the transient shopper who comes into the central business district for daily shopping. This is one sound recommendation we can make to relieve the congested parking situations found in most cities.

Again, it is the human element that must be overcome, because we are all slaves to the convenience of the auto-

mobile. . . . I am sure that if a survey were made in most cities, you would find a high percentage of the garages and parking lots filled with cars parked there for the entire day owned by people who work in office buildings, stores, manufacturing plants . . .

WHAT of pedestrians? The speaker believes that part of the traffic congestion occurring in the central business district is often caused by those on foot. Time is wasted and the traffic flow slowed by improperly channeled pedestrian traffic. He suggests that laws imposing fines on jaywalkers should be enforced, with the additional comment, that "by the same token, you cannot expect cities to do everything for the automobile and nothing for the pedestrian."

Mr. Nichols continues:

. . . It is foolhardy for cities continuously to widen streets and narrow down the sidewalks. This only adds to the congestion in the downtown area by overcrowding the sidewalks with pedestrians and shoppers. So it is sensible to recommend that city governments pay some attention first, to the needs of the pedestrian; second, to the protection of the pedestrian; and third, to the enforcement of pedestrian traffic laws in order to speed up and keep traffic flowing at a reasonable pace.

Automobiles and all other forms of vehicular traffic must be kept moving, says Mr. Nichols.

His suggestions are:

Adequate planning in most every city in the United States will permit the use of certain one-way streets. The synchronization of traffic lights is a must if the flow of traffic is to be kept moving. The use of limited access perimeter highways for those automobiles which have no business in the downtown area will tend to relieve congestion.

Along with the automobile, we must consider the over-road hauling trucks, and those trucks that deliver merchandise to the various downtown business places. Certain times should be set aside for the loading and unloading of these trucks. Adequate parking space should be provided at business places which must have merchandise delivered to them by trucks during the day. On the other hand, the over-the-road hauler should never be permitted to run his drivers through the downtown section of a city with merchandise or material that is not destined for that particular city. Here again is where the limited access perimeter highway can relieve congestion in the downtown area by forcing these over-the-road haulers to use the outside roadway.

PUBLIC transit, providing transportation for workers and shoppers from the outlying suburban districts to the heart of the downtown section, is what Mr. Nichols calls "a very necessary part of any central business district."

But he adds:

. . . local transportation systems themselves account for congestion in the downtown area by poor time schedules, by using buses, either gas or electric, that are too large for the downtown streets. In most cases these buses are much too heavy and are really antiquated as far as being designed to meet the needs of today's heavy traffic. Is there any reason why a bus has to be so high and so wide and take up so much space? Have bus companies done enough research to explore how to streamline operations, speed up service, to find ways and means to take up less space and still carry the same number

of passengers? Have they trained their drivers not to stop in the middle of the street; not to head in to the curb and leave the rear of the bus sticking out because it's the most convenient . . . thing for the driver to do. . . .

Have they [transport systems] taken a realistic look at how best to handle the peak loads? Have they approached certain stores and industries in the community with the suggestion that staggered hours would relieve congestion in the downtown area? Public transportation was designed in the beginning to move large masses of people with a minimum amount of time from the outlying suburban districts right into the heart of the downtown central business district. Have bus firms been willing to move with population changes in rerouting bus lines so that they get the maximum amount of passenger traffic? Or are they content to let old routes remain the way they are . . .

THE speaker admits that many people will never use public transportation where they can drive. "People do not wish to walk one to seven blocks or stand on a cold corner in the wintertime waiting for a bus," he adds. But he concludes that mass transportation systems will remain necessary to the central districts: "Merchants, city governments, and civic planners must work with the bus companies to see how service can be improved."

Notes on Recent Publications

AN inventory of federal government holdings in land and facilities has recently been compiled by the General Services Administration (GSA). It was submitted to Congress at the request of the Senate Appropriations Committee and is now available at the Government Printing Office. The figures reveal that the government, besides owning 21.3 per cent of the nation's total land area, owns gas lines, electric power systems, railroads, telephone lines, and port facilities, all purchased or maintained with tax funds, at a cost of $30.2 billion. According to the GSA survey, the government owns $14.4 billion in buildings and $13.6 billion in "structures and facilities." In the real property category, Interior, AEC, GSA, and TVA trail far behind the Defense Department (all military installations), as to aggregate amounts, but the totals, in themselves, are impressive. Defense, $18.8 billion; Interior, $3,260,000,000; AEC $1,840,000,000; GSA $1.3 billion; and TVA $1,150,000,000. By way of contrast, the total cost of the Post Office Department's 3,000-odd post offices is $468,000,000, or a poor ninth.

"Power development" heads the cost of federal structures and facilities list with a federal expenditure totaling $2,701,000,000. An additional category cited as "electrical distribution systems" (including telephone, telegraph, and microwave), amounts to $206,300,000. Under the power development heading, the cost of facilities is broken down further to three agencies: Interior, $947,000,000; TVA, $927,000,000; Army Engineers, $827,000,000. These figures include hydro projects, appurtenant facilities, and transmission lines. Lesser utility systems (heating, water, and communications) are broken down as follows: Defense $1,616,000,000; AEC, $216 billion; housing, $99,000,000; others, $187 billion. Electrical distribution credited to Defense, Interior, and AEC refers to systems which are owned by the federal government but which distribute electricity purchased from other federal agencies or private producers.

INVENTORY REPORT ON FEDERAL REAL PROPERTY IN THE UNITED STATES AS OF DECEMBER 31, 1953. Prepared by General Services Administration at the request of Senate Committee on Appropriations. U. S. Government Printing Office, Washington, D. C. 1955.

The March of Events

Preference Denounced at EEI Meeting

BEFORE an assembly of approximately 1,500 electric utility company executives in Los Angeles, California, last month, Retiring President Harold Quinton told the twenty-third annual convention of the Edison Electric Institute that a reform of equality was badly needed in federal power legislation. Quinton, who is also president of the Southern California Edison Company, called for an end of tax exemptions granted government power businesses and to preferences granted public agencies and co-operatives in the sale of federal government power.

As evidence of the inequality he noted that the average utility company is now paying 22.8 per cent of its gross revenue in taxes, while the Tennessee Valley Authority pays 2.7 per cent of its gross in lieu of taxes. Quinton called for a 4-point program which would (1) require federal projects to pay equivalent taxes which private companies now bear; (2) require federal projects to bear equivalent state and local taxes; (3) remove tax exemptions enjoyed by local public power agencies; (4) remove tax exemptions on public project securities.

Praise for the Eisenhower administration's "partnership policy," in the field of electric power, was voiced by Kinsey M. Robinson, president of the Washington Water Power Company, and James B. Black, chairman of the Pacific Gas and Electric Company. As an example of how the partnership program encourages development of the country's resources, Robinson cited the proposal now before Congress to authorize the John Day dam on the Columbia river. Black said that the policy was neither new nor strange, but "wholly in the American tradition."

R. G. Rincliffe, president of the Philadelphia Electric Company, described to the EEI meeting the world's largest and most efficient steam electric turbogenerator—a 325,000-kilowatt cross-compound unit. The new unit would produce 3,450 kilowatt-hours of electricity per ton of coal.

Richard Joyce Smith, partner, Whitman, Ransom & Coulson, New York, New York, urged that electric companies meeting the concept of a business "essentially local in character," should be exempt from FPC regulation to avoid duplication of state regulation.

C. A. Tatum, Jr., president and general manager, Dallas Power & Light Company, Dallas, Texas, told the delegates that air conditioning is "setting off a revolution in the living habits of the American people."

A guest speaker at the meeting was H. C. McClellan, president, Old Colony Paint & Chemical Company, Los Angeles, California, and chairman of the National Association of Manufacturers. He called for all industry to join forces "to fight government competition," citing the "interdependence of free enterprise."

Elmer L. Lindseth, president, The Cleveland Electric Illuminating Company, Cleveland, Ohio, recommended that the utility companies get behind the "action" program for rehabilitating substandard housing, including "8,000,000 (homes) in slum or nearly slum condition."

Philip A. Fleger, chairman of the board, Duquesne Light Company, Pittsburgh, Pennsylvania, described to the EEI meeting America's first full-scale nuclear power plant. This plant is being constructed by Western Electric Corporation under contract with the Atomic Energy Commission at Shippingport, Pennsylvania.

Duquesne Light is building the turbo-generator portion and will operate the plant as part of its system.

Edgar H. Dixon, president, Middle South Utilities, Inc., New York, New York, characterized as "outstanding" the industry's response to the AEC's industrial participation program. Mr. Dixon recalled that it has been "less than ten months since the new law permitted this private participation and that even to this day we do not know all the rules."

Louis V. Sutton, president and general manager, Carolina Power & Light Company, Raleigh, North Carolina, warned the industry that the number of groups devoted to "socializing" electric power service is increasing. He urged the industry to "fight for its rights and tell its story to the public."

Philip Sporn, president, American Gas & Electric Service Corporation, New York, New York, presented a paper on the unified record of developments in electric power transmission, including a projection of work for the future.

"For extraordinary enterprise and resourcefulness," particularly in opening up new possibilities for economic fuel use of the nation's untapped lignite resources, Texas Power & Light Company received the Charles A. Coffin Award for 1954.

Harllee Branch, Jr., president and director of the Georgia Power Company, Atlanta, Georgia, was elected president of the EEI for the coming year.

Many complimentary comments were heard on the advance planning for smooth handling of the convention by the host utility company, Southern California Edison. Newsmen in particular were impressed by the thoughtful co-operation provided the issuance of news releases, summaries, and speeches during the convention program. The 1956 annual convention will be held in Atlantic City.

Arizona

Home Lighting Workshop Successful

THE Arizona Public Service Company recently announced successful completion of a "home lighting workshop," cosponsored by the company and the Arizona State College at Tempe. Lectures were attended by fifty-one full-time students and four part-time students, including architects, home decorators, industrial arts and home economic teachers, and lighting advisers. Some of the teachers are going to include home lighting in their courses of instruction next year.

The company's aim is to improve the standard of residential lighting in the Southwest.

California

Bond Issue Measure Approved

A BILL to permit the Sacramento Municipal Utility District to issue revenue bonds for a water and power development project in the Upper American river basin was passed by the state senate early last month and returned to the assembly for concurrence in a minor amendment before going to the governor for signature.

The measure would authorize the district to issue $80,000,000 in bonds to finance a development which will add 200,000 kilowatts of hydroelectric energy to the district's power system.

The measure will be limited to hydroelectric generation of power and main transmission facilities. The transmission lines will include only those facilities needed to deliver the power to load centers. These restrictions were amended into the legislation to eliminate objections of the Pacific Gas and Electric Company and other private power companies.

Maryland

Electric Rate Refund

ANNOUNCEMENT was made on June 3, 1955, that the Baltimore Gas & Electric Company, in accordance with directions from the public service commission of Maryland, would distribute $5,002,035 to its electric customers by means of a credit appearing on bills for service. The credit, amounting to 77.6 per cent of the charge for electric service, will appear on bills covering regular meter readings scheduled for the month of June. For example, an electric bill for that one month which amounts to $5, exclusive of state and city or county taxes, will be reduced by a credit of $3.88.

This electric credit represents the distribution of $5,002,035 which resulted from a reduction ordered by the Federal Power Commission in charges made against the Baltimore Gas & Electric Company by Pennsylvania Water & Power Company. The reduction in charges was requested by the public service commission of Maryland and the Baltimore Gas & Electric Company joined the commission in having the reduction sustained by the courts.

Nebraska

Power Issue Bill Passed

A BILL to permit reorganization of public power districts in the state was given final passage by the state legislature last month. The act removes a ban on merger of public power districts in an effort to effect an out-of-court settlement of pending litigation on the power issue.

A contemplated merger would join Consumers Public Power District with certain properties of the Nebraska Public Power System to form a new Nebraska Public Power District.

During debate on LB 501, several legislators declared that if the districts are not able to solve their problems quickly, the entire matter should be taken up by the legislature. Power district officials were reported having difficulty reaching an agreement on a reorganization plan.

New Hampshire

Tax Bill Gets Final Passage

A BILL placing a tax on public utilities in order to put the state public utilities commission on a self-sustaining basis was given final passage by the state legislature last month and sent to the governor for signature. The levy will produce about $75,000 a year.

New York

To Be Named to Commission

RICHARD H. BALCH, Democratic state chairman, will be named a member of the state public service commission and resign his political post, it was announced recently by Governor Harriman's office.

The vacancy on the commission, which pays $18,500 a year and expenses, was created when Paul E. Lockwood quit on March 30th to become a vice president of Schenley Industries, Inc. The Lockwood term ends February 1, 1963.

West Virginia

Utility Association Program

THE Public Utilities Association of the Virginias has announced its program for the thirty-seventh annual meeting, to be held at the Greenbrier, White Sulphur Springs, September 15th to 17th.

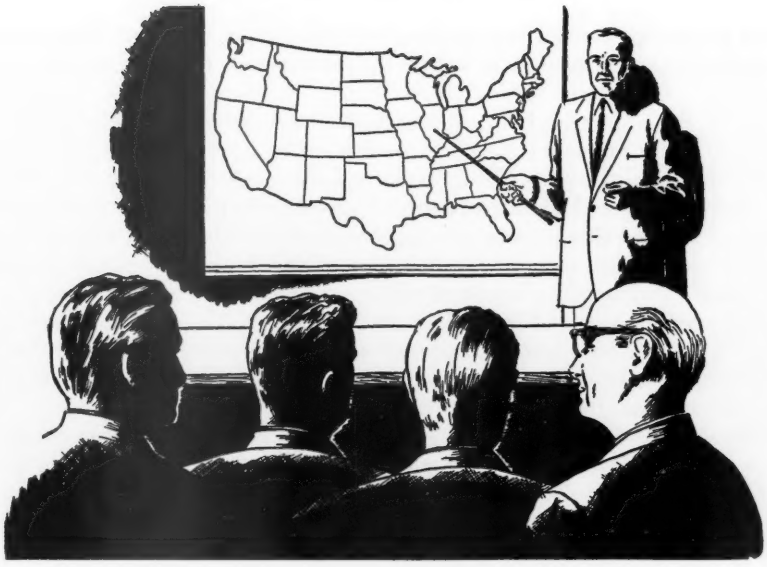
The association, which includes gas, electric, and telephone companies of Virginia and West Virginia, will hear at its first session the Honorable H. Lester Hooker, chairman of the Virginia State Corporation Commission, and Paul D. Brooks, vice president, American Gas & Electric Service Corporation. On the second day of the meeting the program speakers are Charles R. Sligh, Jr., president of the Sligh Furniture Companies, Grand Rapids, Michigan, and former president of the National Association of Manufacturers, who will discuss national tax and economic policies; and Francis X. Welch, editor of PUBLIC UTILITIES FORTNIGHTLY, who will discuss public relations for public utility companies.

Wisconsin

New Gas Case Ruling Issued

THE state public service commission recently modified its February 24th order which directed the Milwaukee Gas Light Company to reduce its rates by $1,262,478 a year and to refund $2,780,000 to its customers. The commission ruled the gas company must reduce its rates by only $938,450 a year and the amount of the refund to $2,441,000. The amount of the average refund will be little less than $5.

The action followed a rehearing at the utility's request. The new order made the rate reduction effective June 19th and directed that the refunds be made as quickly as practical. The new order restored to operating expenses approximately $325,000 annually that had been excluded in the first order. The utility had sought to cut the refund to $1,226,000.



Progress of Regulation

Regulatory Trends

AFFILIATED groups of corporations exercising the privilege of filing a consolidated income tax return may effect savings for the group both under the old tax law and the 1954 Revenue Code. One consequence has been the presentation to regulatory commissions of questions as to treatment of tax savings in rate proceedings. The Kentucky commission considered this question in the United Fuel Gas Company Case, decided May 18, 1955. Features of this case aside from the tax question are reviewed in this issue of the FORTNIGHTLY, at page 64.

Consolidated Tax Return Benefits

United Fuel had computed its federal income tax deduction on the basis of a separate tax return, although actually it does not pay income taxes on this basis. Its taxes, along with other subsidiaries of the Columbia Gas System, are figured on the basis of a consolidated return which effects some savings. These savings are assigned back to the subsidiaries as prescribed by the Securities and Exchange Commission.

United contended that such savings should accrue to the holding company only and that United's taxes, for rate purposes, should be computed on the basis of a separate return. The Kentucky commission did not believe it proper "to allow as an operating expense taxes which are not actually paid." Inas-

much as the tax savings are assigned back to United, the commission was of the opinion that income taxes should be computed on the consolidated return basis.

An important issue, said the Pennsylvania commission in the Manufacturers Light & Heat Company Case (5 PUR3d 346, 381), was the question whether the income tax allowance recognized the actual federal income tax paid on the basis of a consolidated tax return. This case was decided in August, 1954, and it was noted that the new tax law re-established the 52 per cent combined normal and surtax rate and also eliminated the 2 per cent penalty on consolidated tax returns of regulated utility companies. The company had used the 52 per cent rate but had failed to eliminate the 2 per cent consolidation penalty. The commission allowed income taxes on an "actually paid consolidated basis" after adjustment of nontypical or nonrecurring factors which produce an abnormal or subnormal consolidated tax saving.

The same commission, rejecting a claim for a higher income tax allowance for a related company, in the Peoples Natural Gas Company Case (6 PUR3d 341, 370), said that the allowance "must be on the basis of tax actually paid." The importance of the amount of the consolidated tax saving and the parent company's portion of the tax had been increased appreciably by the elimination of the 2 per cent penalty.

Tax Savings to Telephone System

Several commissions have ruled on consolidated return savings of the American Telephone and Telegraph Company and its subsidiaries. The Arkansas commission took the position that since Southwestern Bell Telephone Company is an integral part of the Bell system, it is necessary to consider the entire system in the computation of federal income taxes (2 PUR3d 1, 17). Only Arkansas' fair and proportionate share of the consolidated taxes of the system could be recovered from the user of telephone service. Likewise, the North Dakota commission, after noting that the American Company computes and pays its federal net income tax on a consolidated basis, decided that it was proper to reduce an operating company's recorded federal income tax to reflect the benefits accruing to it as a member of the Bell system (2 PUR3d 93, 95).

In a rate case before the Michigan commission (5 PUR3d 301, 314), Michigan Bell Telephone Company had computed federal income taxes by allocating a part of taxes that appeared on the books of the American Company to the operating company. The commission rejected this method with the statement that it was dealing with the Michigan company as a separate, distinct entity. The fact that this company and its parent had decided since 1951 to file a consolidated tax return, for reasons best known to them, was not controlling upon the commission for rate-making purposes (5 PUR3d 301, 314).

The Chesapeake & Potomac Telephone Company, in a rate proceeding before the District of Columbia commission (6 PUR3d 222, 242), took as a deduction the amount of federal income tax which it would have to pay as an

independent enterprise. It proposed an adjustment which, it was said, merely restored a portion of the additional cost which did not in fact have to be incurred because of partial recoupment permitted by consolidation. The commission said that to permit this partial recoupment to be retained by the parent company would be an unjust enrichment.

In a rate case before the New York commission (5 PUR3d 33, 55), it was noted that a penalty of 2 per cent must be paid where the Bell system had filed consolidated tax returns to avoid the intercorporate dividend tax. It was urged that the New York Telephone Company was entitled to credit for tax savings under the proposed 1954 tax bill, as passed by Congress, which would remove the penalty of 2 per cent. The commission said that neither the intercorporate dividend tax nor the penalty for filing a consolidated return had ever been paid by the New York company. The commission said it would not have permitted it to be done, if attempted. It would, therefore, be inconsistent to use any such tax savings in a readjustment of the New York company's figures.

The Ohio commission rejected a contention by cities opposing a telephone rate increase that the operating company should be credited with some part of the money which the American Company saved by filing a consolidated return (8 PUR3d 136, 151). The subsidiary paid the same taxes it would have paid had it filed a separate return.

Assumption as to Consolidated Return

A somewhat different phase of the consolidated return problem was presented in the Panhandle Eastern Pipe Line Company Case (3 PUR3d 396, 429). It had been contended that Panhandle should file a consolidated federal income tax return with its subsidiary, Trunkline Gas Supply Company, and that the income tax deduction should be based on the assumption that such a return was filed. The Federal Power Commission went into the question whether Trunkline would have any taxable income and whether there would be any advantage in filing a consolidated return. Various tax possibilities were considered. Among other things, there was the question of a net operating loss carry-over and the question of accelerated amortization. The commission concluded that the proposition was so speculative that it would not be justified in considering the possible tax savings from a consolidated return.

Review of Current Cases

Power Project License Award Upheld Despite State Opposition

THE United States Supreme Court, in reversing a judgment of the United States court of appeals (4 PUR3d 292) has upheld the authority of the Federal Power Commission to authorize a power project on a nonnavigable river in Oregon despite that state's opposition. State approval, in addition to the federal license,

was not required, according to the court.

Federal Power Act Application

The project was to be located on "reserved lands of the United States." Generally, the commission's jurisdiction over power project licenses depends upon the navigability of the waters of the United States to which the license applies. Here, however, the jurisdiction turned upon the ownership or control by the United States of the reserved lands.

The authority to issue licenses for power projects on navigable waters of the United States springs from the Commerce Clause of the Constitution, whereas the authority to do so in relation to public lands and reservations of the United States emanates from the Property Clause. In the Federal Power Act "public lands" and "reservations" have established meaning. Public lands are lands subject to private appropriation and disposal under public land laws. "Reservations" are not so subject, the court said.

Since title to the lands and waters involved was found to rest in the United States, authorization of the project was held to come within the exclusive jurisdiction of the Federal Power Commission unless that jurisdiction should be modified by other federal legislation.

Inapplicability of Desert Land Act

The state of Oregon argued that the Desert Land Act of 1877 and related statutes expressly delegated the power to regulate the use of these waters to the state. These acts, it claimed, preclude or restrict the scope of the jurisdiction, otherwise apparent on the face of the Federal Power Act, and require the consent of the state to a project such as this one. The court deemed it unnecessary to pass upon the question whether this legislation constituted the express delegation claimed by the state because these acts, it held, were not applicable to the reserved lands and waters involved.

The Desert Land Act covers "sources of water supply upon the public lands." The lands involved in this case were not "public lands" but "reservations." The court said that it is a familiar principle of public land law that statutes providing generally for disposal of the public domain are inapplicable to lands which are not unqualifiedly subject to sale and disposition because they have been appropriated to some other purpose. Consequently, the court recognized that these acts could not apply to the license, which related only to the use of waters on "reservations of the United States."

Justice Douglas dissented on the ground that the state of Oregon had veto authority and that there was no distinction between "public lands" and "reserved lands."

Commission Findings

Finally, the state questioned the discretion used by the commission in granting the license. It pointed to the consequences which the project would have beyond the limits of the reserved lands on which it would be located. For example, the variation in, or the temporary interruption of, the flow of the stream was referred to. The commission had concluded that this objection was met by the license provision for a reregulating dam. The effect of the project on the spawning of fish was also considered, but the commission had placed restrictions in the license to meet objections on that score.

It was further argued that the project would preclude the carrying out of certain plans for the Columbia river basin which contemplate greatly enlarging the fish population in the river area. The court said that while such an argument might properly be directed to the Federal Power

Commission or to Congress, it was not one for it to answer upon the basis of existing legal rights. *Federal Power Commission v. Oregon et al. No. 367, June 6, 1955.*

Commission Rules on Lease-management Agreement For Private Mobile Telephone Systems

THE California commission was asked to approve an agreement relating to the leasing and maintenance of private mobile telephone systems. A gas company was to sell its systems to a telephone company, which, in turn, would provide maintenance thereon after leasing the systems back to the gas company.

The commission first found that such owning, leasing, and maintenance of the systems would not reduce the quality or availability of regular public utility telephone service. The rates under the lease-management agreement, however, were deemed not to be adequate to cover the telephone company's full costs and provide a fair return.

The commission was of the opinion that the proposed arrangement constituted a public utility service, but it did not direct the filing of a tariff, since the company's entry into the field was still on an experimental basis and conditions and costs varied between different private systems.

The commission was convinced that it would not be in the public interest to prevent the company from following new lines of development in the communications field. The fact that monopolies must be regulated with respect to rates and service, did not imply, said the commission, that they should be barred from contributing to and profiting from technological progress. The commission's duty was to prevent the taxing of ratepayers to finance experiments, not to prevent companies from engaging in new projects at their stockholders' risk.

The commission concluded that the proposed arrangement would be beneficial to the gas company and its customers but not fully compensatory to the telephone company. An interim order was issued pending further negotiation between the companies with regard to the rates under the lease-management agreement. *Re Southern California Gas Co. et al. Decision No. 51271, Application Nos. 35843, 35844, 36551, March 29, 1955.*

Land Account Figures Differing from Original Cost Accepted in Rate Case

A WATER company was authorized by the California commission to increase rates so as to produce a return of 5.48 per cent. Additional revenue was necessary to offset curtailment of water well pumping and an increase in cost necessitated by increased use of purchased water. The company was also directed to reduce its employee discount for service from 50 per cent to 25 per cent.

The commission's staff had contended that the opening entries for landed capital recorded on the company's books, based upon existing market values at time of acquisition, should be supplanted by historical cost of lands (original cost, esti-

mated if unknown). The commission first commented that, although it generally followed the policy of using original cost of the operative properties to determine the rate base, the original cost of the company's lands in this case could not be determined. Some value other than the original cost would have to be used.

The company's recorded balances represented the appraised market values for certain lands as of 1927. The staff had substituted other appraised market values for the same lands as estimated at an earlier date by other engineers. Neither represenetd original cost but the staff maintained that their figures gave a truer indication of original cost. There was no evidence, held the commission, that such was the fact.

The commission noted that no adjustment to recorded balances of land accounts had been made at the previous rate proceeding. Nor was such adjustment recommended by any of the parties therein, although the proceeding was a contested one. Since 1927, when the opening entries were placed on the company's books, 90 separate formal proceedings involving company financing, rates, and related problems had come before the commission. In all such proceedings the commission had adhered to and recognized the appropriateness of the company's book figures. They had met the test of review over a long period of time.

There is a very real virtue, stated the commission, in maintaining, and it is in the public interest to have, stability in rate making. Convinced that the company's recorded balances were reasonable, the commission concluded that they should be left undisturbed. *Re California Water Service Co. Decision No. 51452, Application No. 36323, May 10, 1955.*

Evidence as to Allocation Properly Excluded

THE Idaho supreme court held that the trial court had not erred in refusing to allow the commission to cross-examine a telephone company's witness concerning the Separations Manual. The commission had sought to introduce allocation evidence in a proceeding on a telephone company's application for a temporary injunction permitting it to collect increased rates under bond pending final court review.

The determination of the company's right to injunctive relief, said the court, rested upon the company meeting its burden of proving that great and irreparable injury would result unless the relief sought was granted. The only issue within the jurisdiction of the trial court therefore, was the determination of the company's right to injunction under bond. No collateral issues could be considered unless the relevancy thereof was established. The commission had made no showing indicating the materiality and relevancy of the Separations Manual. *Mountain States Teleph. & Teleg. Co. v. Jones, 280 P2d 1067.*

Monthly Peak Factor Used for Fixing Natural Gas Demand Costs

THE Kentucky commission, in prescribing higher rates for the United Fuel Gas Company, assigned demand costs to two separate demands—3-day

peak factor and monthly peak factor. It assigned only the company's liquefied petroleum gas to the 3-day peak demand and all other demand costs to the monthly peak demand.

Use of the 3-day peak demand for apportioning liquefied petroleum gas costs was considered proper because the plants were located at load centers for the purpose of assisting and meeting peaks of short duration.

The total cost of gas purchased from the Southwest was assigned to commodity as against the company's contention that it should be apportioned into demand and commodity charges. Generally the company purchases no more gas under its firm gas contracts on a peak day than on any other day of the year. Consequently, the relative use by the company's customers on the peak day, or any other basis of demand, does not affect the demand charge of this gas any more than their relative use during the summer, when sales are at a minimum.

Production and Storage Costs

The commission assigned all costs relative to the company's own production to commodity. It did this for two reasons: First, the company's production during January, the peak month of the test period, was exceeded during five other months of the period including one relatively warm month; second, the annual load factor on a peak month basis for the test period would exceed 100 per cent.

The company's storage costs were assigned to demand since the company is able to meet the peak of the winter months and still purchase Southwest gas at high load factor, due primarily to the company's large storage facilities.

Test Period

The company's actual experience for the twelve months ending June 30, 1954, was adopted as a test period. The company had not only used the same period but added a forecast for 1955. The commission rejected the company's estimate on the theory that a forecast made up for budget purposes generally is not sufficiently accurate for rate-making purposes.

This test period was adjusted to reflect certain known changes in cost, such as increased wages and gas supply costs. The rate base was predicated on net average original cost. From this sum the reserve for depreciation and customers' contributions were deducted. Because of the inclusion of construction work in progress in the rate base, interest during construction was treated as an income item.

Income Taxes

The commission also ruled that for rate-making purposes income taxes should be computed on a consolidated return basis, since the company, as a member of the Columbia Gas System, does not pay taxes on the basis of a separate return. This ruling is discussed more extensively in this issue of the FORTNIGHTLY, under "Regulatory Trends," at page 59. *Re United Fuel Gas Co. Case No. 2801, May 18, 1955.*

Does Municipal Water Utility Serve in a Proprietary Or Governmental Capacity?

THE Wyoming commission dismissed the complaint of a number of individuals against the action of a municipality in providing free irrigation-ditch water service to certain areas. The complaining parties were all residents of the

city and users of its regular underground utility service. They claimed that the city was discriminating against them in that the service could not be extended to include their premises and that the ditch water users obtained their irrigation water free during the irrigation season, while the complainants were required to use and pay for metered water to irrigate lawns and gardens. They also asserted that, in addition to paying higher water bills, they were contributing to the cost of the ditch service through the payment of taxes without receiving any benefits.

City Answers Complaint

The city answered with a request that either the complaint be dismissed or that rates be established for the ditch service. The city contended that the ditch service was operated as a governmental function and that "inequities, discrimination, and preferences always arise in connection with all municipal improvements and endeavors."

Question for the Courts

The commission ruled that the principal matter complained of was not the city's failure to make the ditch service available to all (since the complaining parties actually did not want the service) but rather that no charge was made for the service. The commission's authority to declare this to be a utility service and to establish rates did not depend upon the need for regulation in the public interest but hinged upon the right of the city to perform the same in a governmental capacity. If the right exists, the commission's regulatory powers are not effective since it has no legislative authority to interfere with the administration of municipal government.

The commission, in dismissing the complaint, made this comment:

> Whether the city may legally perform this service in its governmental capacity or whether it must do so in its proprietary capacity is a question of law for the courts to decide. In our opinion, the subject matter of said complaint should not have been addressed to this forum but to the courts.

Day et al. v. City of Riverton, Docket No. 9262, May 19, 1955.

Reciprocity Agreement Not Applied to Gross Receipts Tax

THE Virginia court of appeals upheld the commission's refusal to apply a reciprocity agreement between the states of Connecticut and Virginia to motor carrier operations in the process of being sold by a Delaware corporation to a Connecticut corporation.

The reciprocity agreement would permit the corporation to seek a refund of the gross receipts road taxes paid to the state of Virginia.

The court recognized the fact that a contract had been made between the two corporations and that the Connecticut corporation had irrevocably bound itself to complete the purchase. However, the court pointed out that the contract was subject to the approval of the Interstate Commerce Commission and that unless and until this was given, the deal could not be consummated. With this in mind, the court refused to find that the Connecticut corporation was the beneficial owner of the trucking business so as to establish the exemption from the gross receipts tax pursuant to the reciprocity agreement. *Adley Express Co. v. Virginia, 86 SE2d 818.*

Commission Denied Power to Raise Stock Issue Price

THE North Carolina superior court denied the commission's power to impose, as a condition of granting a telephone company permission to issue new stock to existing stockholders, a requirement that the issue be offered at a higher price than the utility had determined upon.

The only pertinent finding that the commission made to support the condition was that the higher price would produce more money with which the utility might more easily meet its financial needs.

The court took the position that the commission's requirement was an undue interference with managerial discretion since the commission made no findings based on evidence to show that the requirement affected the public interest. *North Carolina ex rel. Utilities Commission v. Carolina Teleph. & Teleg. Co. May 31, 1955.*

An Attorney Fee of $861,000 Allowed in Holding Company Reorganization

THE Securities and Exchange Commission has approved attorney fees of $861,000 for services rendered in a holding company reorganization proceeding. This represented a settlement arrived at in arm's-length bargaining. Originally the attorneys had asked for a fee of $3,500,000. The approval was granted to forestall costly and lengthy litigation involving complicated questions of law.

Legal Services Performed

The legal services involved three rather distinct phases and were spread over a period of approximately eight years. In the first phase, the attorneys represented a group of preferred stockholders which contended that the original reorganization plan was unfair to them as against the creditors of the company. The second phase involved the representation of two directors who had been elected by the $4 preferred stockholders. In addition, the attorneys were retained by the holding company in special situations involving services in connection with reorganization of its subholding company. A third phase consisted of their representation of the $4 preferred stock committee.

Benefit of Services

The attorneys did not appear in the proceedings until after commission and district court approval of the original reorganization plan. At that late date they succeeded in having the plan remanded and eventually set aside in favor of a new plan. The eventual outcome of the reorganization allegedly resulted in the $4 preferred stockholders receiving assets worth from $126 to $140 per share, rather than assets worth $6 per share under the original plan, a gain in the aggregate of nearly $100,000,000. The common stockholders would have been wiped out under the original plan, whereas under the final plan they received assets upwards of $50,000,000.

The commission observed, however, that the eventual benefits to the stockholders had not been foreseen by the attorneys. When they first appeared before the district court, their sole contention was that the allocation proposed in the original plan was unfair to the company's preferred stockholders. Their representation to the court at that time was to the effect that the value of the securities proposed to be

distributed to the company's creditors had been assigned a basic value below their inherent value on a then current market valuation.

The attorneys' services during the first phase of their activities were conceded to be unusual in the sense that they were successfully rendered in the face of initial concerted opposition by the holding company, by counsel for the commission, by the creditors, and, moreover, in the sense that they resulted in very large benefits to their clients and the estate. On the other hand, the commission pointed out that these services reflected merely an attempt to defeat a plan and obtain for the security holders represented a greater participation than had been proposed for them.

This is what representatives of security holders who participate in a § 11(e) reorganization generally seek to do.

Nature of Fee Claim

The attorneys claimed that it would not be fair to compensate them on any basis which did not take into consideration application of the so-called "salvage" or "fund recovery" doctrine. Furthermore, they argued that primary jurisdiction to determine their fee rested not with the commission but with the United States district court before which their most significant services were rendered. They pointed out that District Judge Leahy had said this case presented "an array of complicated facts and issues of law which are not only unique but of first impression in any case relating to such proceedings under § 11(e)."

The commission said that it had never seen fit to apply the "salvage" or "fund recovery" doctrine which would measure the lawyer's fee on the basis of a percentage of any increased participation accruing to the class which his services have benefited. It did not believe this doctrine has any place in the fixing of reasonable fees in § 11 reorganizations.

As to the question of jurisdiction, it said that while it is well settled that the commission ordinarily has primary jurisdiction as to the fees in holding company reorganization, it has not been determined by the courts whether this rule extends to a case where, as here, the services for which the fee is sought originated before the enforcement court rather than before the commission.

The commission considered the benefits conferred and the results achieved, normally the "primary factors," in measuring the reasonableness of fees. It also recognized the fact that the courts would be strongly urged to give effect to the "salvage" or "fund recovery" doctrine. If the courts were so persuaded, the amount of the attorney's fee might be much larger than the settlement.

In concluding that this was a proper case for settlement, the commission pointed out that there is no precise formula to determine the reasonableness of a settlement and that a rather wide range exists within which any settlement can be found to be reasonable, especially when arrived at as a result of arm's-length bargaining. *Re Standard Gas & E. Co. et al. File Nos. 54-72, 54-173, 54-191, 54-199, Release No. 12878, May 13, 1955.*

Hourly Rate for Log Haulage Canceled

MINIMUM hourly rates for the transportation of logs between certain points by highway common carriers were established by the California commission

a few years ago, as a temporary measure towards stabilization of the log transportation industry. Upon being informed by its staff that the rates established were generally regarded by the industry as impractical and were not being observed, the commission ordered a public hearing to determine whether the rates should be modified, suspended, or canceled.

The evidence presented showed that the custom and practice of log haulers was to assess charges upon thousand-board-foot measure rather than hourly rates. The shippers were desirous of having the rates based upon such measure, rather than hourly rates, because all their transactions in logs and lumber were predicated upon footage units.

A staff member testified that efforts to enforce the present rates had been ineffectual because of the general opinion held by the industry that such rates were impractical for log transportation. He further stated that the hourly rates were difficult to enforce because following the vehicle was necessary in order to obtain evidence of violation.

The commission concluded that the present hourly rates did not serve any public or useful purpose, and ordered their cancellation. The hourly rates, said the commission, were not required to be retained until such time as the commission was prepared to establish footage rates, since the rates were shown not to be in the public interest. *Re Minimum Rate Tariff No. 2, Decision No. 51307, Case No. 5432, April 12, 1955.*

Poor Load Factor Results in Surcharge to Users of Water-wasting Cooling Units

A WATER company sought to stem the unrestrained installation and use of "nonconserved" water-cooled air-conditioning units by applying to the Missouri commission for authority to impose a surcharge upon the users thereof. Nonconserved units are those in which the water is not recirculated for further use, but is allowed to drain off. The company's daily pumpage of water during the warmest seasons of the year had been augmented very perceptively by the use of such units.

The commission noted that, since nonconserved units cost less than conserved units, their use would increase. If unrestrained installation would continue at the present rate, by the year 1958, about 50 per cent of the company's daily pumpage would be required to serve them during the summer season. The company would be forced to install, permanently, additional plant and distribution facilities merely to serve these units during four or five months of the year. There were no offsetting water services during the colder seasons of the year which could balance, or level off, the seasonal demands.

Therefore the services under consideration were characterized by the well-known operative term, "a poor load factor." Such poor load factor, said the commission, should be remedied or given some special rate treatment. Otherwise, the costs of supplying cooling water to these units inevitably would be carried by other, or better load factor, classes of users who in no way were responsible for the creation of the present condition.

The only rates applicable to the nonconserved units were general bracketed metered rates. These rates were based upon the constant year-round services to the public and were not designed to serve, and did not compensate the company for

serving, the rapidly increasing poor annual load factor created by the demands of these units.

The commission was of the opinion that it would be impractical to redesign the general bracketed rate schedule so as to provide a compensatory rate for the poor load factor without increasing the rates in each bracket and, consequently, unduly increasing the rates of other and year-round general customers who used no such nonconserved units.

Conceivably, the commission pointed out, the company could design a separate rate structure for the seasonal service involved. Since such a rate structure, of necessity, would be based upon plant costs, including the permanent expansion of facilities to provide this summer or seasonal service, it was doubted that such a structure would be an improvement upon, or of more practical application than, the proposed surcharge.

The commission realized that if it refused to make any provision authorizing a surcharge or some other remedy for the situation, the installation of nonconserved units would continue and ultimately require plant expansion made necessary to meet only seasonal peak load. This would probably result in an application for a general increase in rates for all customers, which the commission desired to prevent.

The commission concluded that some provision was necessary whereby the nonconserved unit users were made to either bear their share of the cost of service for additional plant ultimately required by such service, or else eliminate their demands for excessive and peak-load service by conversion to conserved units within a reasonable period. The surcharge was authorized, but its application was postponed to the 1957 season. *Re St. Louis County Water Co. Case No. 12,938, April 4, 1955.*

Commission Prescribes Accounting Procedure Pending Telephone Company Merger

THE North Carolina Telephone Company (formerly Matthews & Waxhaw Telephone Company) received authorization from the North Carolina commission to acquire the outstanding common stock of, and to merge, the Anson Telephone Company. A request to change the corporate name (retroactively from Matthews & Waxhaw) and issue and sell more stock was also granted. The commission found that the transactions were for a lawful object within the corporate purpose, were compatible with the public interest, and would not impair the performance of service to the public.

The entire purchase price of the Anson Company's stock was required by the commission to be recorded on the company's books in an account entitled "Investments in Affiliated Companies," to remain in that account until the actual date of the merger.

At the merger date, the commission noted, the matter of the disposition of the excess of purchase price over book value would arise. The company claimed that an immediate write-off of the entire excess would adversely affect its ability to raise capital necessary to its expansion and improvement program. The commission agreed and, consequently, was of the opinion that no adverse effect upon the public could arise through amortization of the excess over a 10- year period, provided the amortization was made directly to earned surplus. *Re North Carolina Teleph. Co. Docket P-70, Sub 6, March 25, 1955.*

Natural Gas Company Properly Given Leeway in Applying Increased Rates

THE California commission has denied a rehearing of its earlier order (8 PUR3d 8) authorizing Pacific Gas and Electric Company to increase rates to offset higher charges for its out-of-state supply of natural gas. In so acting it held that the order was not unlawful as applied to the firm industrial and interruptible industrial customers.

The insinuation that the commission prescribed increased rates based solely upon cost of service was rejected as being incorrect. The commission said that it considered all the permissible elements of rate fixing.

It also observed that it is not bound to employ any single formula or combination of formulas in determining rates.

The parties seeking the rehearing pointed out that in a prior proceeding involving the company the commission employed a different method than in the instant case. The commission deemed this fact to be immaterial, if true, stating that it is free to reconsider and re-examine its past action in a prior proceeding or even in the same proceeding.

In authorizing higher rates, the commission had given the company a considerable amount of leeway in the adjustment of rates to interruptible customers so as to establish, in effect, a differential for firm and interruptible service. This was considered proper by the commission on the ground that it had not in any way abdicated its regulatory authority. Any increase of these interruptible rates must be submitted to it and authorized by it before becoming effective.

The commission said that it must be presumed that it will act lawfully in considering and passing upon any rate proposal which the company might file involving any interruptible customers. The interruptible service specially and peculiarly lent itself to the type of treatment which had been accorded it because the service is competitive with other fuels. *Re Pacific Gas & E. Co. Application No. 36635, Decision No. 51428, May 6, 1955.*

Rapid Growth of Rural Telephone Company Prevents Establishment of Permanent Rates

THE Louisiana commission declined to establish permanent rates for a telephone company that was experiencing very rapid growth. The commission said that a substantial part of the company's plant was designed for future use and that, consequently, the plant investment per customer was steadily decreasing.

Rehabilitation of Plant

The company was able to rehabilitate and modernize its plant by obtaining a loan from the Rural Electrification Administration. With the completion of the first installation of modern dial equipment with full selective ringing on all party lines, more and more applications for service, particularly from rural areas, were received. The ultimate number of subscribers, the commission said, is still a matter of conjecture.

Comparison of Rates

The commission conceded that the rates approved were higher than rates for Bell system exchanges in the area but pointed out that it is a generally recognized fact that a small company cannot operate as

economically as a large one. Bulk buying, centralized management, and other economies of a larger operation were cited as the explanation of this fact.

The rates allowed were lower than those requested but higher than those previously approved. An additional $23,000 in gross revenues would be afforded by the new schedule, provided that the estimated increase in customers proved accurate. *Ex Parte East Ascension Teleph. Co., Inc. No. 6506, Order No. 6684, March 10, 1955.*

Water Meters Not Necessary Except to Curb Wastage

THE California commission authorized a water company to increase flat rates, but saw no reason for requiring the installation of meters on the system, except as a means of curbing possible water wastage.

The system had been on a flat rate basis from inception and was satisfactorily meeting the needs of both the consumers and the utility. Partial metering of the system, in the commission's opinion, except for those uses not specifically provided for in the flat rate schedule or for consumptions found to be materially in excess of average, would produce discriminatory treatment of consumers.

Irrigation Ditch Abandoned

The commission found that permitting the company to take a certain irrigation ditch out of service would be for the overall benefit of the system and in the public interest.

No future expansion of agriculture in the area seemed possible. The demands of existing irrigators could be met by supplying them from the piped town system without adversely affecting such system, provided certain restrictions were made as to the peak flow of the respective deliveries. *Re Natomas Water Co. Decision No. 51451, Application No. 35820, May 10, 1955.*

Items Lacking Evidence Excluded from Rate Base

THE New Jersey commission authorized a water company to increase its rates to a point that would afford a return of 6 per cent on the rate base, refusing as unreasonable a schedule of rates designed to produce a 6.17 per cent return.

In ascertaining the rate base, certain claimed additions to the property inventory were disallowed for lack of evidence of their actual acquisition. It was uncertain when improvements then under construction would be completed, and how much of the work had already been finished. Therefore, only one-half the total estimated cost was allowed.

Since the company failed to amortize a rate case item claimed in operating expenses, the commission adopted a 10-year amortization period. *Re Mount Holly Water Co. Docket No. 8503, May 25, 1955.*

Excessive Salaries Disallowed in Rate Case

THE Louisiana commission granted a transit company a rate increase calculated to produce a return of 6 per cent. In determining operating costs, the com-

mission disallowed a part of the executive salaries considered excessive, saying that such salaries should be graded in accordance with the financial standing of the industry and should not exceed a reasonable proportion of the gross revenues.

Moreover, certain depreciation expense claims based on costs incurred in converting equipment in prior years were declared improper charges against current operations. Nor would the commission allow donation items, or wage increases granted immediately prior to the application for higher rates, in arriving at operating costs. *Ex Parte Shreveport R. Co. No. 6637, Order No. 6678, February 21, 1955.*

Power Company Permitted to Abandon Steam-heating Service

THE Wyoming commission authorized an electric company to discontinue rendering steam-heating service to several commercial establishments within the same community. The steam was no longer a by-product of the company's electric operation but had to be produced in separate boilers in a system which had deteriorated to the point where complete rehabilitation was required.

The other factors considered were that the company's customer list had steadily diminished over the years and that the cost of rehabilitation would require the imposition of rates beyond the point of diminishing return.

Adequacy of Notice

Protesting customers conceded all of these facts but contended that they had not been given adequate notice. The commission ruled that a letter dated April, 1954, in which the company notified its customers that steam-heating service would be discontinued before the 1955-56 heating season was adequate notice. *Re Pacific Power & Light Co. Docket No. 9290, May 27, 1955.*

Other Recent Rulings

Rate Suspension. The Federal Power Commission held that a natural gas rate which has been filed and has become effective may not be challenged or suspended, except in the manner provided by § 5 of the Natural Gas Act. *Re Virginia State Corp. Commission et al. Docket No. G-8558, April 21, 1955.*

Working Capital Allowance. The Connecticut commission allowed a water company working capital in an amount equivalent to operating expenses for a 45-day period but refused an additional allowance equal to average cash balance, where tax accruals were available for general corporate purposes. *Re Birmingham Water Co. Docket No. 9060, April 29, 1955.*

Stock Split-up. A split-up of common stock having par value of $100 per share into ten shares of common stock having a par value of $10 per share does not constitute an issuance of common stock, but rather an amendment of a previously authorized issuance so as to describe the total common stock outstanding as having a $10 par value in lieu of a $100 par value, ac-

cording to the Wisconsin commission. *Re Wisconsin Fuel & Light Co. 2-SB-597, April 28, 1955.*

Permit Transfer to Corporation Refused. The Colorado commission refused to authorize the transfer of a private carrier permit from an individual operating a truck line to a corporation under his complete direction and management, where past operation under the permit was attended with frauds, delinquencies, and other misconduct and the contemplated transfer appeared to be merely a subterfuge intended to relieve the actual operator from personal responsibility for future delinquencies. *Re Perry (Service Truck Lines) Application No. 12876-PP-Transfer, Decision No. 44189, April 22, 1955.*

Temporary Stay Denied. The supreme court of New Hampshire denied a temporary stay pending appeal from a commission order authorizing a railroad to discontinue a station agency service, and pointed out that an order is presumed reasonable because of the commission's specialized assistance and experience in regulation, although whatever course is taken, injury may result to one party or the other. *Town of Tilton et al. v. Boston & Maine Railroad, 113 A2d 543.*

Commission Division of Crossing Costs. The California commission, in dividing the costs in a grade separation case, stated that its jurisdiction issues from a delegated police power which charges the commission, in its sound discretion, with the duty of fixing and assessing against the railroad concerned a fair and reasonable part of the costs as determined by all the facts and evidence of record. *Re City of San Diego, Decision No. 51396, Application No. 35466, April 26, 1955.*

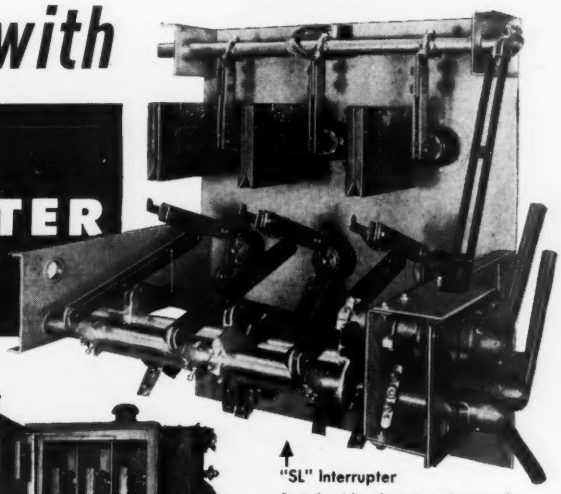
Carrier Ordered to Provide Service. A truck line was ordered by the Colorado commission to provide service to a milk shipper, though his premises were accessible only by way of an easement over the lands of another, such easement being recognized in a decree of a court of competent jurisdiction; nor was the commission deterred in its order by reason of inconvenience sustained by the carrier in having to open and close a gate to the shipper's premises. *Brink v. David (Smokey Hill Truck Line) Case No. 5098, Decision No. 44129, March 30, 1955.*

Emergency Facilities Not Chargeable to Public. A water company was not permitted by the Missouri commission to increase rates in order to amortize by charges to operating expense, over a short period, the cost of an emergency system properly chargeable to permanent plant, nor the cost of other temporary emergency facilities in the nature of an extraordinary expense which ought to be borne by stockholders. *City of Springfield v. Springfield City Water Co. Case No. 12,899, April 22, 1955.*

Scope of Review. A federal court, the United States district court for Massachusetts pointed out, may not usurp the function of the Interstate Commerce Commission nor substitute the judgment of the court for that of the commission with respect to the scope of a motor carrier certificate unless it appears that the commission's construction is clearly wrong or arbitrary. *A. B. & C. Motor Transp. Co. v. United States, 130 F Supp 87.*

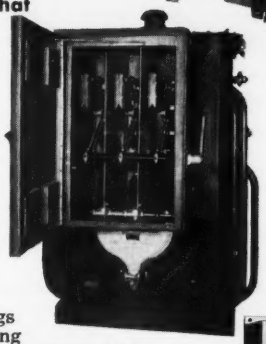
Greater Flexibility *and Low Cost Protection with*

"SL" INTERRUPTER SWITCHES



Not just an interrupter—not just a disconnect—but a combination that breaks loads safely—and when equipped with power fuses you get full system protection.

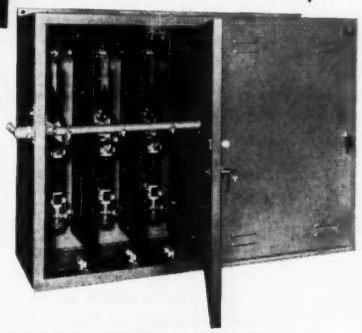
"SL" Interrupter Switch with selector and grounding switch (fully interlocked).



← "SL" Interrupter Switch mounted directly on transformer.

When specifications call for opening of circuits under moderate load you will find Delta-Star type "SL" Interrupter Switches will meet the requirements perfectly. Used with power fuses, they provide an economical means of fault protection.

Interrupter in combination with power fuses for fault protection.



Units are available in voltage ratings of 5, 7.5 and 15-KV with interrupting capacities of 400, 200 and 100 amperes respectively. Continuous capacity of switches may be as desired since the main switch is independent of the interrupter. Furnished with or without metal housings in single, two or three pole units for mounting on transformers, walls or structures.

Load interruption is accomplished by momentarily shunting the full load current through a by-pass circuit. Here the arc is extinguished by rapidly elongating it within a confining chute. Danger of external arcing or contact burning is eliminated.

There is an "SL" Interrupter Switch for every application.

Ask for Publication 4612.

WHEN YOU WANT THE BEST IN HIGH VOLTAGE SWITCHING EQUIPMENT SPECIFY DELTA-STAR

DELTA-STAR ELECTRIC DIVISION

H. K. PORTER COMPANY, INC.
OF PITTSBURGH
2437 FULTON STREET, CHICAGO 12, ILLINOIS
DISTRICT OFFICES IN PRINCIPAL CITIES

Industrial Progress

Texas Gas Transmission Seeks To Expand Facilities

TEXAS Gas Transmission Corp. recently asked the Federal Power Commission for authority to add $19,900,000 worth of new natural gas transmission facilities to its existing system in six southern and midwestern states.

The project would include construction of 198 miles of pipeline and the addition of 20,270 horsepower in compressor capacity. The new facilities would be built along the company's existing system in Louisiana, Arkansas, Mississippi, Tennessee, Kentucky and Indiana.

Purpose of the project, according to Texas Gas Transmission, is to make available 35 million cubic feet of natural gas a day to Ohio Fuel Gas Company, Columbus, and a total of 73.6 million cubic feet daily to 36 other customers.

Large Expansion Projected by North. Illinois Gas

NORTHERN Illinois Gas Company plans to spend $60,000,000 on new construction through 1958, Marvin Chandler, president, announced recently.

The company added 28,500 customers in 1954 and expects to exceed that figure this year, Mr. Chandler said. Even so, the Company still has a waiting list of 131,000 for residential heating, compared with 104,000 a year ago, he disclosed.

CP&L Adds Unit At Wilmington

A SECOND generator just put into operation has doubled the capacity of the Louis V. Sutton steam electric generating plant near Wilmington, making it the largest in Carolina Power & Light Company's system.

That report was made recently to CP&L's directors' meeting by Mr. Sutton, board chairman and president for whom the plant is named.

Mr. Sutton said activation of the second unit gives the Wilmington plant a power capacity of 300,000 horsepower. Operating 85 per cent of the time, this plant will generate one and a half billion kilowatthours per year, or four times the Wilmington area's present needs.

By this time next year, the company hopes to complete installation of the largest single generator on its system—at its Cape Fear river plant near Moncure, N. C.

Sylvania Predicts Rapid Gain In Nuclear-produced Power

BOTH the nation's use of electricity and the output of electric products will double in the next 10 years, an official of Sylvania Electric Products Inc. predicted recently.

In an appraisal of the nation's future in another rapidly expanding industry—atomic power—a second Sylvania official said that progress in the generation of electric power by atomic energy will be slow at the start, but that 25 years from now, more than half of the power plants then building will be nuclear powered.

In discussing the unprecedented expansion in the production and use of electric power, Frank J. Healy, vice president—Operations of Sylvania, told a meeting of the Security Analysts of Los Angeles that the nation's current annual consumption rate is more than 400 billion kilowatt-hours. This figure will double in the next ten years, he added, and may reach a trillion kilowatt-hours by 1970.

The combined electrical-electronics manufacturing industries also will greatly increase their output over the next decade, Mr. Healy said. Eight years ago, he explained, these two industries constituted a $6 billion business annually, and today their combined rate is about $16 billion. Ten years from now, these industries should be in the $30 billion category.

In plotting for the Security Analysts a probable timetable of the application of atomic energy to the generation of electric power, Stanley B. Roboff, manager of industrial coordination for Sylvania's Atomic Energy Division, said the process would be slow at the start, but would rapidly gain increasing momentum.

Describing Sylvania's work in the atomic energy field, Mr. Roboff said the company is engaged in the development of new and better fuels for atomic reactors including power plants, reactor materials and components, and cheaper, more efficient means of separating and recovering spent fuels. He said that fuel producers will be to the atomic energy electric power industry of the future what the coal and oil producers are to the electric utilities today.

Gas Industry Par Plan Completes Decade of Progress

DURING 1954 the PAR Plan of the gas industry completed its first decade of existence—ten full years of progress, James F. Oates, Jr., chairman of the PAR Committee, stated in the 1954 PAR Annual Report just issued. Mr. Oates, who also served as PAR chairman in 1953, is chairman of The Peoples Gas Light and Coke Company of Chicago.

In his report, Mr. Oates said the past ten years have seen a continuing growth of PAR activities, as well as a continuing growth of problems which must be solved to assure long-term profitability of the expanding gas utility and pipeline industry.

Financial support from utility and pipeline companies has increased from an annual average of $1,552,000 for the first three years of the PAR Pro-

(*Continued on page* 24)

gram (1945-1947) to a record of $2,222,000 in 1954. A substantial part of the increase has been required to meet higher costs of conducting research and placing advertisements and has not been available to provide for a much needed expansion of the program. Mr. Oates also pointed out that the greater financial support achieved in recent years was provided by fewer companies representing a smaller proportion of total industry meters.

Special notice was given in the report of two outstanding PAR developments. The first was the inauguration of an active and comprehensive research program under PAR to make possible more satisfactory and economical gas air conditioning. The second development was the inclusion, presently on a supplementary optional basis, of significant Public Information activities as part of the 1955 PAR Plan.

Calectric Awards Contract To Fluor for 60,000 KW Unit

CALIFORNIA Electric Power Company, Riverside, California, has awarded The Fluor Corporation, Ltd., Los Angeles, a contract to design, engineer and construct a nominally rated 60,000 kilowatt steam-electric generating unit at a new Southern California plant location. This unit is the first of four units planned for construction at the new site. The total cost of the four units is estimated at $35,000,000.

The total cost of the first unit will be in excess of $9,500,000, according to Carl C. Ernst, vice president and general manager of California Electric Power Company. The design will incorporate the use of a reheat boiler to supply steam to the turbo-generator at a pressure of 1800 psig with initial temperature of 1,000° F. and reheat of 1,000° F. Large cooling towers will be used to cool the condenser circulating water.

Fluor is currently completing construction of a $5,000,000 generating unit, last of a series of four generating units started in 1951, for Calectric at its Highgrove steam plant, located between San Bernardino and Riverside. Highgrove's four units, all engineered and constructed by Fluor have a rated capacity of 140,000 kilowatts. This last Highgrove unit will be placed in operation about October 31, Mr. Ernst said.

California Electric Power Company marked the 50th anniversary of its founding last year.

(*Continued on page* 26)

J. H. Holan Appoints Sales Manager

RONALD E. HULL has been appointed sales manager of J. H. Holan Corporation, Cleveland, Ohio, it was announced by V. H. Warner, vice president of sales.

Mr. Hull comes to Holan from Highway Trailer Company, Edgerton, Wisconsin, where he was sales manager. He was at Highway 10 years, and, prior to that, was affiliated with General Motors Corporation. At Holan, he will be in charge of truck body and power equipment sales from the Cleveland plant.

Newly Improved Relay on Feeder Voltage Regulators

GENERAL Electric's feeder voltage regulators now have an improved voltage regulating relay, according to G. E.'s Power Transformer Department, Pittsfield, Mass. Although similar in appearance to those used previously, the new features of the relay will be reflected in increased regulating accuracy.

Cushion mounting has been added to isolate vibration and reduce intermittent contact arcing, preventing sporadic operation and allowing the contacts to make and break cleanly. These advantages extend the life of the relay's contact tips.

Upper stationary contacts of the voltage regulating relay are now flat, not hemispherical. Alignment is not critical. In addition, possible hooking of the two contacts, after sudden voltage surges, is eliminated.

Pivot wear on the voltage regulating relay has been greatly reduced by tipping the pivots with osium-iridium. The jewel pivot bearings are also springloaded to retain their setting for many years.

Burroughs Introduces New Automatic Check Endorser

INTRODUCTION of a new flexible high speed automatic check endorser to be used in conjunction with Burroughs Micro-Twin microfilm recorder and reader, or the Twin without the reader, has been announced by Noel L. Mudd, general sales manager, Burroughs Corporation.

Featuring an interchangeable printing head that can be installed or removed without opening the microfilm machine, the new endorser will accurately endorse checks at the same time and at the same speed with which they are microfilmed. It can be used to endorse, cancel or imprint other material on documents.

The announcement states that use of the endorser assures the user that each check receives a complete, distinct and individual endorsement in the proper position. In addition, the day, month and numerical coding number necessary can be changed from the operator's position without removing the endorser head, without making any internal adjustments or touching any inked parts.

Pennsylvania Power to Build New Unit at New Castle

PENNSYLVANIA Power Company will build a fourth turbo-generator unit at its New Castle power plant at West Pittsburgh.

The unit will be ordered shortly and will be scheduled for operation in the fall of 1958.

The new unit with its related facilities will cost over $17,000,000. The turbo-generator will be built by Westinghouse Electric Corp. and will have a rated capacity of 90,000 kilowatts, operating at 1450 pounds pressure.

The boiler, which will have a capacity of 690,000 pounds of steam per hour, has been ordered from Babcock & Wilcox Co.

The total capacity of the plant, including the existing units, will be 263,000 kilowatts. The new unit will be approximately the same in size as No. 3 unit.

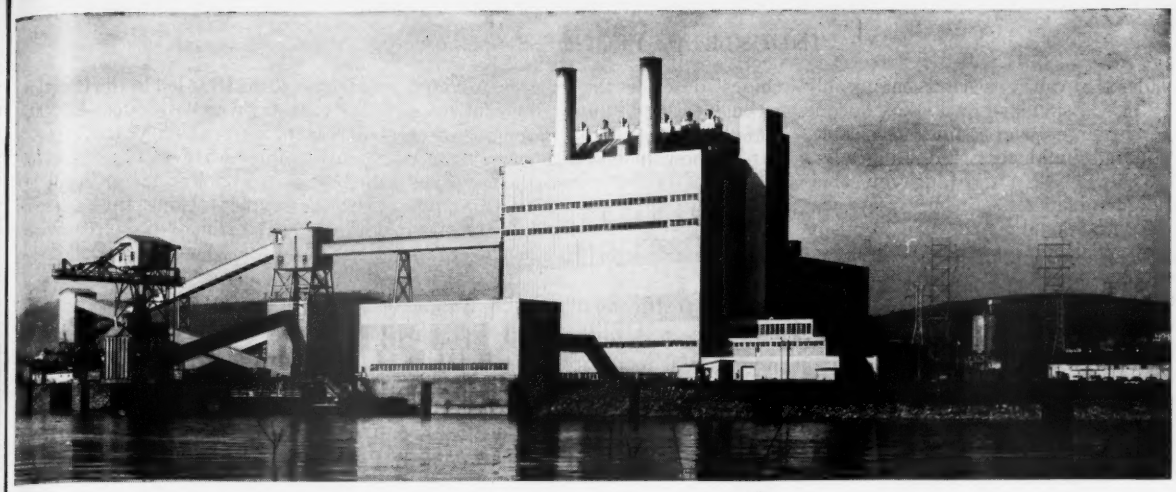
I-H Issues Catalog on Crawler Tractors and Equipment

A BOOKLET entitled "What's New in International Crawler Tractors and Equipment" has just been published by International Harvester Company.

The 30-page illustrated booklet lists recent improvements that have been made in International TD-24, TD-18A, TD-14A, TD-9, T-9, TD-6 and T-6 crawlers. It devotes extra space to a description of the new International TD-24 Torque Converter diesel crawler, just introduced in March.

In addition, the booklet lists and pictures new International equipment that has been added recently to round out the IH line. In this category are three new hydraulically-controlled

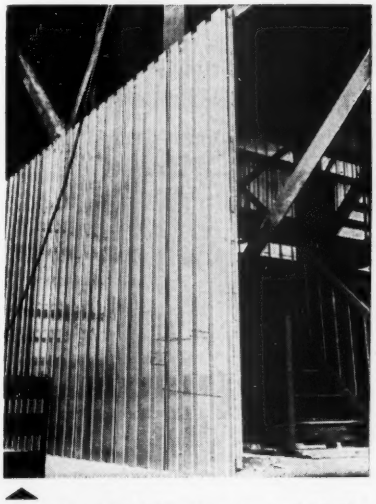
(*Continued on page* 28)



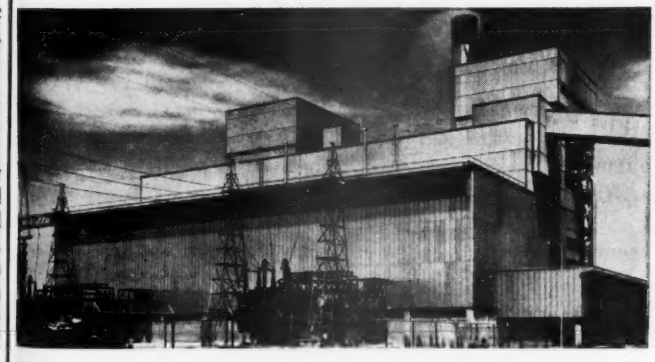
Q-Panel walls grace the new Elrama Power Plant (above) near Pittsburgh. It was designed by Duquesne Light Company's Engineering and Construction Department. The Dravo Corporation was General Contractor.

Why fine new power plants everywhere have Q-Panel Walls

Builders of new power plants in all parts of the country have specified Q-Panel walls for the following very good reasons: 1. Q-Panels are permanent, dry and noncombustible, yet may be demounted and re-erected elsewhere to keep pace with expansion programs. 2. Q-Panels are light in weight, thus reducing the cost of framing and foundations. 3. Q-Panels have high insulation value . . . superior to a 12" masonry wall. 4. Q-Panels are quickly installed because they are hung, not piled up. An acre of wall has been hung in 3 days. For more good reasons for using Q-Panel construction, use the coupon below and write for literature.



Q-Panel walls (above) go up quickly in any weather because they are dry and hung in place, not piled up.



More than 32,000 sq. ft. of Q-Panels were used to enclose the impressive Hawthorn Steam Electric Station (left) of the Kansas City, Missouri, Power and Light Company. Ebasco Services, Inc., designed and built the plant.

Robertson

Q-Panels

H. H. Robertson Company

2400 FARMERS BANK BLDG. • PITTSBURGH 22, PA.

Offices in Principal Cities

Please send a free copy of your Q-Panel Catalog.

NAME

FIRM

ADDRESS

PUF1

blades that can be used interchangeably on TD-24 standard or TD-24 Torque Converter crawlers; four new cable-mounted bulldozers and bullgraders for the TD-18A, and four new cable-mounted blades for the TD-14A.

To find out about the many new improvements in International crawlers and equipment, write for a free copy of the booklet to Consumer Relations Department, International Harvester Company, 180 N. Michigan Ave., Chicago 1, Ill.

"All Offices Can Afford Automation!" Says Statistical Tabulating Booklet

THE most advanced, cost-reducing business methods and modern equipment are now within the budget of every business, regardless of size, according to a newly published booklet, "Methods, Manpower and Machines." Offered by Statistical Tabulating Company, the booklet explains how it is possible for a small business as well as the largest to use the latest, speediest and most economical office techniques.

"Methods, Manpower and Machines" describes the services provided to business and industry by Statistical Tabulating Company. Case histories explain how firms representing twenty classes of business have been served profitably. Free copies are available from Statistical Tabulating Company, 53 W. Jackson blvd., Chicago 4, Ill.

Contest for Best Match Books In Utility Field

AN awards competition for the best match books of the year, covering each of 46 industries, has been announced by the Match Industry Information Bureau, 500 Fifth Avenue, New York 36, New York.

Entry forms are being made available by the Bureau, without obligation, and a bronze "Joshua" plaque will be awarded for the entry in each industry adjudged best from the standpoint of selling copy, art-work and typography.

The closing date for entries will be September 1, and all match books in circulation during the current year will be eligible.

Prize plaques are named "Joshuas" after Joshua Pusey, Philadelphia attorney and inventor whose patent on match books in 1892 led to the creation of an industry which produces 12,500,000,000 match books a year.

One plaque award will be made for the best match book in the utility field, previous winners being the Citizens Utilities Company of Greenwich, Conn., and the New Jersey Bell Telephone Company of Newark.

Metropolitan Edison to Build Large Power Plant

THE Metropolitan Edison Company announced recently that it will build one of the largest power plants in the East at a site along the Delaware river.

The new multi-million dollar plant will be built on a 132-acres tract at Sandy Shore and is scheduled for operations by April 1, 1958. The announcement added that it will be large enough to meet electric power needs of the northern Delaware Valley industry far into the future.

Ultimate capacity, it was disclosed, will exceed one million kilowatts.

Production of the first unit, to cost 25 million dollars, will begin in the fall. At least eight units are planned in successive steps, the company said.

Columbia Gas System
delivers a modern miracle
24 Hours-A-Day!

CHARLESTON GROUP: United Fuel Gas Company, Atlantic Seaboard Corporation, Amere Gas Utilities Company, Virginia Gas Distribution Corporation, Big Marsh Oil Company, Central Kentucky Natural Gas Company; **COLUMBUS GROUP:** The Ohio Fuel Gas Company; **PITTSBURGH GROUP:** The Manufacturers Light and Heat Company, Binghamton Gas Works, Cumberland and Allegheny Gas Company, Home Gas Company, The Keystone Gas Company, Inc., Natural Gas Company of West Virginia; **OIL GROUP:** The Preston Oil Company.

PROFESSIONAL DIRECTORY

• This Directory is reserved for engineers, accountants, rate experts, consultants, and others equipped to serve utilities in all matters relating to rate questions, appraisals, valuations, special reports, investigations, financing, design, and construction.

(Professional Directory Continued on Next Page)

PROFESSIONAL DIRECTORY *(continued)*

PROFESSIONAL DIRECTORY *(continued)*

PROFESSIONAL DIRECTORY *(concluded)*

Abrams Aerial Survey Corporation
PHOTOGRAMMETRIC ENGINEERS FOR MORE THAN A THIRD OF A CENTURY
Aerial Photography — Atlas Sheets — Mosaics — Plan and Topographic Maps — Profiles — Infra-red Photography — Photo-interpretation Instruments
614 E. Shiawassee St. Lansing, Michigan

Peter F. Loftus
CORPORATION
DESIGN AND CONSULTING ENGINEERS
Electrical • Mechanical • Structural
Civil • Thermodynamic • Architectural
FIRST NATIONAL BANK BLDG., PITTSBURGH 22, PA.

EARL L. CARTER
Consulting Engineer
REGISTERED IN INDIANA, NEW YORK, OHIO, PENNSYLVANIA, WEST VIRGINIA, KENTUCKY
Public Utility Valuations, Reports and Original Cost Studies
910 *Electric Building* *Indianapolis, Ind.*

LUCAS & LUICK
ENGINEERS
DESIGN, CONSTRUCTION SUPERVISION, OPERATION, MANAGEMENT, APPRAISALS, INVESTIGATIONS, REPORTS, RATES
231 S. LaSalle St., Chicago

ENGINEERS, CONSTRUCTION AND MAINTENANCE CONTRACTORS
for the GAS INDUSTRY
CONSOLIDATED GAS AND SERVICE CO.
327 So. LaSalle St., Chicago 4, Ill.

LUTZ & MAY
Consulting Engineers
STEAM, GAS & DIESEL POWER STATIONS
PUMPING PLANTS—ELECTRIC SYSTEMS
REPORTS—DESIGN—APPRAISALS
1009 Baltimore Kansas City 6, Mo.

GANNETT FLEMING CORDDRY AND CARPENTER, INC.
ENGINEERS
HARRISBURG, PENNSYLVANIA
Investigations—Reports—Appraisals
Original Cost and Depreciation Studies
Rate Analyses—Insurance Surveys

MINER AND MINER
CONSULTING ENGINEERS
INCORPORATED
GREELEY COLORADO

FRANCIS S. HABERLY
CONSULTING ENGINEER
Valuation — Depreciation
Investigations and Reports
122 South Michigan Avenue, Chicago

A. S. Schulman Electric Co.
Electrical Contracting Engineers
Transmission Lines—Distribution—Power Station—Industrial—Commercial Installations
Chicago Los Angeles

JACKSON & MORELAND
Engineers and Consultants
Design and Supervision of Construction
Reports — Examinations — Appraisals
Machine Design — Technical Publications
BOSTON NEW YORK

SLOAN, COOK & LOWE
CONSULTING ENGINEERS
120 SOUTH LA SALLE STREET
CHICAGO
Appraisals — Reports
Operating — Financial — Plant

Mention the FORTNIGHTLY*—It identifies your inquiry*

INDEX TO ADVERTISERS

[The Fortnightly lists below the advertisers in this issue for ready reference. Their products and services cover a wide range of utility needs.]

*Fortnightly advertisers not in this issue.

Public Utilities

FORTNIGHTLY

Index to Volume 55

Including the Issues of January 6, 1955
to June 23, 1955

PUBLIC UTILITIES REPORTS, INC.
WASHINGTON, D. C.

INDEX

To Vol. 55 of *Public Utilities Fortnightly*

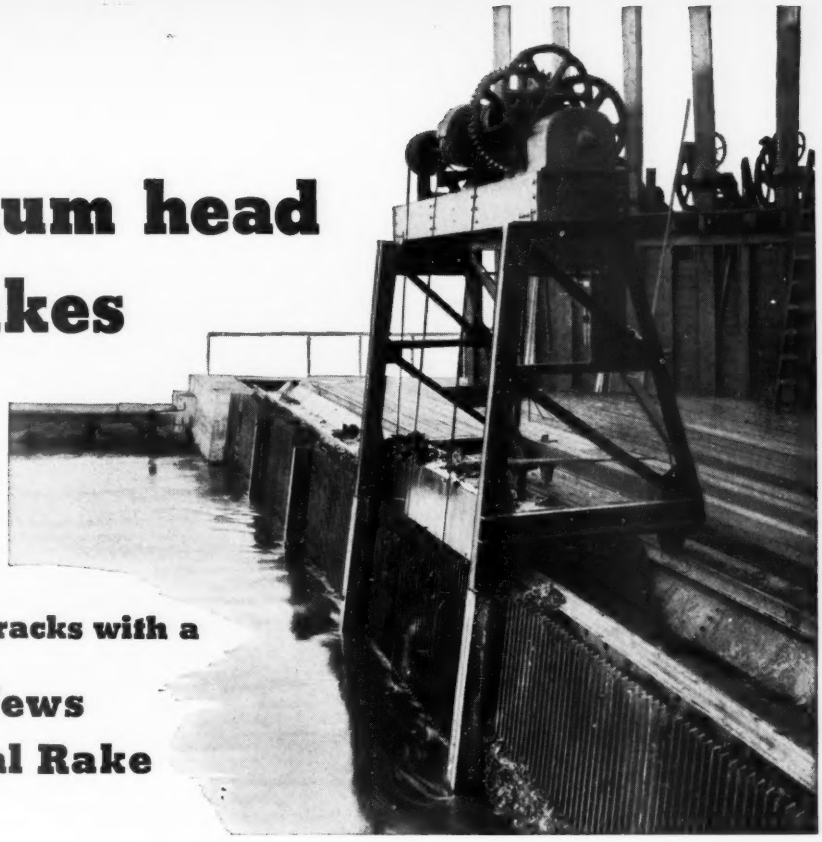
Pages by Issue

Subject Index

PUBLIC UTILITIES FORTNIGHTLY INDEX

Feature Articles

Gain maximum head at Intakes



...by cleaning your racks with a

Newport News Mechanical Rake

Keeping racks clean is essential wherever a few inches of head loss can reduce output of the wheels.

One company calculated the capitalized value of each inch of head gained at its plant as $6,000. Measured in terms of the value of additional power output, a Newport News rack rake installed at this plant is paying for itself over and over again the year 'round.

Power-operated to clean trash racks at water intakes of hydroelectric plants, steam plants, pumping stations, canals and similar installations, the Newport News Mechanical Rack Rake reduces a major hand-labor task to one of minor periodic activity.

Under ordinary conditions, one man per shift can, with a Newport News Mechanical Rack Rake, keep the racks clean for a dozen bays.

Write for your copy of "RACK RAKE," an illustrated booklet describing the operation and advantages of the Newport News Mechanical Rack Rake. Use the convenient coupon now.

NEWPORT NEWS
Shipbuilding and Dry Dock Company
Newport News, Virginia

Newport News Shipbuilding and Dry Dock Company
Dept. PUF-7-7, Newport News, Virginia
Please send me a copy of "RACK RAKE."

Name_____ Title_____
Company_____
Address_____
City_____ State_____

Here's Proof of Performance...

Pressure-creosoting increases pole life for Consumers Power Company

• In 1931, Consumers Power Company, serving 64 Michigan counties, stopped the use of untreated and butt-treated poles in its rural distribution systems in favor of pressure-creosoted poles. Today approximately two-thirds of the company's poles in electric distribution lines are pressure treated, 80% of those being full length pressure-creosoted Southern Yellow Pine.

The average cedar pole, used until 1931, had a normal life expectancy of 23 to 25 years at the most. The life expectancy excluding losses for other than natural causes, of the pressure-creosoted Southern Yellow Pine poles being purchased today is probably upwards of 40 years, according to George A. Clark, Electric Distribution Supervisor.

Pressure-creosoting, according to Mr. Clark, gives positive penetration averaging over 80% of the sapwood and with the use of modern vacuum processes after treatment, today's poles are dryer and cleaner.

In the company's scheduled maintenance program, its full-length pressure-treated poles are not to be given a boring inspection until they have been in service 25 years.

Long life and cleanliness go hand in hand when you use pressure-creosoted poles. Especially if USS Creosote is used. If you would like more information, contact the nearest Coal Chemical sales office listed below or write directly to United States Steel Corporation, 525 William Penn Place, Pittsburgh 30, Pa.

You can obtain clean pressure-creosoted poles upon specification without sacrificing pole service life.

Close-up, at right, of a Consumers Power Pole, showing 1937 dating nail.

Pressure-creosoted poles in a rural line of Consumers Power Company, Jackson, Mich.

USS CREOSOTE

SALES OFFICES IN PITTSBURGH, NEW YORK, CHICAGO, CLEVELAND, SAN FRANCISCO AND FAIRFIELD, ALA.

UNITED STATES STEEL